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ABSTRACT

Discussion at the OECD Education Committee meeting focused on education policies of OECD nations in the context of social and economic trends, the contribution of education to preparation for working life, and the transition from school to employment. The report is presented in two major sections. Section I outlines the educational policy debate. Statements by the Secretary-General of the OECD and by the Minister of Education and Science of the Netherlands focused on the need for educational re-assessment and innovation, educational objectives, individual and social needs with regard to education, governmental responsibilities to provide education, teacher training, the role of education in the emancipation of women, and political motivations of various social groups seeking specific types of education. Following these statements are outlines of themes discussed by the ministers and a declaration of educational policy priorities. These include taking a long-term view with regard to educational issues, increasing educational cooperation between nations, and increasing access to education. Section II contains a report prepared by the OECD Secretariat to provide background information to the meeting participants on educational policy trends. Topics discussed include demographic trends, enrollment trends, teacher supply and demand, trends in educational expenditure, and interrelationships between education and employment. (DB)

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FUTURE EDUCATIONAL POLICIES IN THE CHANGING SOCIAL AND ECONOMIC CONTEXT

Report of the Meeting
of the OECD Education Committee
at Ministerial Level
19 - 20 October, 1978

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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PARIS 1979

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PREFACE

The present volume is a report on the first Ministerial-level meeting of the OECD Education Committee, held in Paris on 19th-20th October, 1978.

Discussions at the meeting focussed on two main themes:

— Education Policies in the Context of Social and Economic Trends;

— Relations between Education and Working Life: The Contribution of Education to Preparation for Working Life and the Transition to Employment.

For each of these themes Ministers had at their disposal a special paper prepared by the Secretariat, setting out the main points for discussion. These Discussion Papers are reproduced in Part One, following the opening statements by the Secretary-General of the OECD, Mr. Emile van Lennep, and by the Chairman of the Meeting, Mr. Aaron Païs, Minister of Education and Science, Netherlands.

At the end of their deliberations, Ministers adopted a Declaration embodying their agreed views on the main aims deserving priority consideration in future educational policies in the changing social and economic context of the OECD countries. The Declaration was subsequently noted by the Council of the Organisation. The text of the Declaration, together with that of the accompanying Communiqué summarising the outcomes of the meeting, is also reproduced in Part One.

The Ministerial discussions were preceded by consultations between the Chairman and Vice-Chairmen of the meeting and representatives of the Business and Industry Advisory Committee (BIAC) and the Trade Union Advisory Committee (TUAC), the results of which were reported to the meeting at its outset by the Chairman. The written comments submitted by these two bodies on the issues under discussion are reproduced at Annexes 1 and 2 of Part One of the volume.

Part Two of the volume contains the analytical report on Educational Policy Trends which had been prepared by the Secretariat to provide the evidence and background material to the issues taken up in the Ministerial discussions. Other background material made available to Ministers consisted of two recently published reports on *Education Policies and Trends in the Context of Social and Economic Development Perspectives* (OECD, 1977) and on *Education and Working Life* (OECD, 1977).

Part One

THE POLICY DEBATE

OPENING STATEMENT

by Mr. Emile van Lennep, Secretary-General of the OECD

In welcoming you to this meeting of the OECD Education Committee at Ministerial level, I would like to say a special word of thanks to Mr. Païs, Minister of Education and Science in the Netherlands, for accepting to preside over your deliberations. The discussions I and my staff have had with him in recent days have revealed the sharp, penetrating analysis he brings to bear upon the complex problems of education to be discussed under your agenda. I am sure you will join me in hoping that his task, though arduous, will also be pleasant.

Your presence here today is indicative of the interest which all our Member countries currently attach to the role and position of education in the social and economic development of the advanced, industrial democracies. It is also, I should like to think, a further recognition of the contribution which this Organisation has made, and can continue to make, to effective co-operation among Member Governments towards the elucidation of the complex policy issues involved, and the search for appropriate solutions.

Indeed, the importance of the relationship between education and economic and social policies, which has been the hallmark of the OECD approach to education, has never been clearer than at the present time. The Analytical Report prepared by the Secretariat leaves no doubt about the extent to which the changing economic, social and demographic environment is having a major impact on educational policy.

In these necessarily brief introductory remarks, I shall address myself to two aspects of the interface between education and this changing environment:

- first, the prospect of a slower rise in educational expenditures; and
- second, the implications for education of the prevailing high levels of unemployment among the young.

The dramatic expansion of educational opportunities has been one of the remarkable achievements of our societies in the last two decades. From about 1960 until the early seventies, national expenditures on education grew on average 1.4 times more rapidly than GDP. Universal primary and lower secondary education have been largely achieved. The upper secondary school has expanded very rapidly in many countries, partly to feed the fast growth of the universities and new forms of higher education, and partly to satisfy the needs of the economy for a wide range of sub-professional skills. The number of students receiving higher education doubled.

But a turning point appears to have been reached—in the words of some: "The education bubble has burst".

Mr. Chairman, may I say that I dispute both the pessimism and the nostalgia which characterise this judgment. Education, by its very nature, is a long-term investment by society and by individuals. It is therefore very important to disentangle the influence of passing events from more fundamental changes in society, and to avoid hasty changes in policy which may be damaging in the longer term.

First, I believe that the slowing down in educational growth, after the hectic pace of expansion in the 1950s and 1960s, would have taken place regardless of the onset of the economic recession in 1973-75. It was indeed inevitable that there should be some reaction after the very rapid growth of the 1960s. The marginal benefits to society were bound to diminish as coverage became more universal and the supply of highly qualified entrants to the labour force increased. No doubt the benefits to individuals were great and continue to be great, but this raises the question as to who should pay for such benefits. No one questions, of course, the need for a publicly-financed basic education for everyone, but if the benefits of higher education accrue to a relatively small group in society it seems unreasonable for the public purse to carry the entire burden of an ever-lengthening process of education.

Second, the onset of the 1973-75 inflationary recession did, of course, sharpen the debate about the limits to educational growth. The anti-inflationary stance of policies in OECD countries led governments to put the brakes on the rise of public expenditures and taxation in terms of GNP. Education, as one of the major components of public budgets, inevitably had to share the burden of restraint. And the taxpayer has become more vigilant about how much he pays, and what he pays for.

I would suggest that there are a number of lessons to be drawn from this situation. First, that the demographic slowdown in student numbers in many countries, while it creates transitional problems for teacher training, provides an opportunity for consolidation of earlier advances by improving the quality of basic education. Second, that there is an enhanced case for improved effectiveness and efficiency in education. And third, that new demands—for example, for pre-primary, compensatory and recurrent education—should be carefully scrutinised against the background of current economic constraints and social preoccupations.

Let me turn to the problem of high levels of youth unemployment. It is sometimes argued that the blame for this lies with our education systems, because young people are not being provided with the qualifications needed for them to get jobs. This is obviously nonsense insofar as, during the recent period of slow growth, there simply have not been enough job opportunities for new entrants to the labour force. But it is also very true that under present difficult circumstances it is a matter for particular concern if certain groups among the young find themselves at a disadvantage because of a lack of usable qualifications. And, over the longer run, it seems that part of the problem of structural unemployment reflects a mismatch between the supply and demand for particular skills in the labour market.

In the years of rapid growth and strong pressures in the labour market, industry snapped up the young as they left school, and trained them at the work place. Now the picture has changed—and this will probably continue for a number of years. The young do not so easily find a job where they can acquire skills. This is not, in itself, an argument for giving them more education—it is an argument for giving them the *right* education.

Of course, I realise that the definition of what is the "right education" is precisely the dilemma we are facing—and, indeed, the central problem of this meeting. This is fundamentally a long-term rather than a short-term issue. Indeed, we must avoid the danger of distorting the general aims of education in reaction to cycles of high unemployment. It is the permanent responsibility of the public authorities to seek for a just equilibrium between education geared to the changing requirements of the labour market and education designed to serve the wider needs of the individual and society. In the years ahead this reconciliation will need to take account of two major forces in the advanced, industrialised societies of the OECD.

First, OECD countries have entered a period of rapid structural adaptation to changes in demand, technology and the structure of the world economy. This involves increasing calls on the inventiveness and adaptability of the labour force and on provisions for acquiring new skills. It argues against a too narrowly vocational approach. It also strengthens the case for recurrent education, as promoted by the OECD over recent years, whereby education and training opportunities are distributed more evenly over the lifespan of the individual.

Second, given the context of continuing, if more moderate, economic growth, the new social demands which emerged during the 1960s are likely to persist. Improvements in the quality of life and in the working environment are, to some extent, the corollary of a more highly educated population—as is participation in decision-making in economic and community affairs. And, while it now seems that the role of education in reducing economic and social inequalities may have been exaggerated, this does not mean that efforts to improve the educational opportunities of the disadvantaged should be abandoned.

To sum up, I believe that far from being faced by contraction or stagnation, education is moving into a challenging period of re-assessment and innovation. Expenditure will rise less rapidly. Educational needs may have to be redefined so as to foster a more flexible pattern of education over the life cycle. Alternative organisational structures and institutional techniques will need to be developed, particularly for adult students. The teaching force will need to be retrained and redeployed. Management and control will need to be strengthened. And none of this can be achieved without closer co-operation between the education authorities and those who are responsible for the daily affairs of the school, and between the educational sector, the broader community and the world of work. And in this connection, I would like to emphasise the need for and the usefulness of the consultations which took place yesterday with the trade unions and employers, through the Trade Union Advisory Committee and the Business and Industry Advisory Committee to the OECD.

Mr. Chairman, it is in this sense that I am confident that the present meeting can make a significant contribution—by helping to bring about a greater appreciation of the position of education within the national polity, not as an isolated sector of policy but as a vital component of overall national policies, in dynamic interaction with other sectors, contributing to the development of the kind of society and economy we wish to see in the years ahead.

STATEMENT

by Mr. A. Païs,
Minister of Education and Science, Netherlands
Chairman of the Meeting

I am indeed honoured to have been invited to preside over this important meeting. Being as I am fairly new to educational politics, and even newer to the OECD, it is not without some trepidation that I am assuming this role.

I was very sensitive, Mr. Secretary-General, to your initial stimulating remarks which I am sure will set the tune for our discussions during these two days. I further think I am expressing the views of all my colleagues here in congratulating you and your colleages in the Secretariat on the quality of the materials— particularly the Analytical Report and the two Notes for Discussion— which you have made available to us to help us along. Thank you very much indeed.

The issues put before us touch on some of the basic determinants of the future development of our societies and there is, I submit, no point in trying to conceal the essentially political nature of the matters we are about to discuss. Our countries have been through a long period of very rapid educational growth. I wonder whether we have yet grasped the full significance of the impact of this unique historical phenomenon on the political, social and economic structures of our societies.

There is no doubt, for example, that rising levels of education, more widely spread throughout the population, have played an important role in altering the political balance in our societies. And much of the debate about education today, and questions as to whether there is "over-education", as some would like to see it, or "undereducation" as others view it, is politically motivated. In the last analysis, it has to do with the capacity which education generates among various social groups to have increased access to power.

I think it is important that we should keep this broad political back-cloth in mind as we endeavour to pick up the challenge which the Secretary-General has so clearly put before us both in the Notes for Discussion and in his opening remarks. As for me, I have no doubt that the challenge *is* there and that it is to a large extent a *common* challenge.

I am not going to anticipate the debate, but I would like to put forward three or four general issues of a more or less sensitive nature which may help to animate our discussions.

The analysis which the Secretariat has put before us shows clearly that the two main topics of our agenda are closely interrelated. It also leaves no doubt about the extent to which the changing economic and social environment, *largely outside the ambit or control of education*, is having a major impact on educational policy.

This is perhaps most evident in the case of new priorities in educational spending, necessitated by the more limited public resources now available as a result of the recession, the efforts to re-establish non-inflationary growth and new claims from other sectors of social policy. Speaking for my own country, I know it would be extremely difficult to maintain the same level of public resources for education that we have had in the past, particularly in view of the overall contraction of the service resulting from the demographic downturn.

What do we do in these circumstances? One answer, and one which is constantly thrown at us, is to manage better what we have; I agree, much could be done to set our house in better order, but we all know there are limits, and often undesirable consequences, to what "better management" can do. The other, and surely more valid, response is to seek alternative ways of augmenting the resources by drawing upon those available in the community, with all that this implies in terms of opening up the educational service to community interests and needs. This will be particularly relevant to the discussions we are going to have on the Relations between Education and Working Life and the closer co-operation which such relationships imply between the education and training sectors on the one hand and various elements in the community, particularly enterprises and trade unions, on the other.

This brings me to my second major point, which has to do with what I see as a greater diffusion of educational responsibilities. Education is becoming too serious a matter to be left entirely to educationists, if I may be forgiven the plagiarism. I think this will probably be a much longer drawn out affair because of ingrained habits and the traditional self-contained posture of the educational establishment. The insistence from many quarters for an increased professionalisation of the teaching force may tend to reinforce this posture; it will certainly not solve the problem of teacher unemployment which, for the first time in the history of our societies, is looming large on the employment horizon. All the redeployment that is possible to take account of fluctuations in enrolments at different levels will not be able to solve this problem; new measures have to be envisaged to make teachers more mobile, not only within the profession but in other sectors of employment as well. In this respect, and with particular reference to teacher supply, the implications of demographic trends will have to be taken into consideration, but I do consider the working out of new policies towards teachers as the crux of educational politics in the future.

There is another issue on which I would like to place special emphasis. Girls and women experience much more acute difficulties than men on the labour market. This points to the necessity for education to take measures in order to meet their specific needs. More generally, I should like to emphasize the important role which educational policy can play in the process of the emancipation of women.

Finally, I would like to say a few words about educational change itself. This is related to the three issues I have already mentioned, for in a situation of contraction, financial as well as in terms of pupil and teacher numbers, at least in some educational sectors, the system becomes static, experimentation and innovation more problematic. Needless to say, those who suffer most are those who are already disadvantaged. How to deal with this problem, particularly in times of structural unemployment which leaves young people out of the mainstream of society, is probably the biggest challenge ahead, not for educational policy on its own, but for policy *tout court.*

In addition, taking demographic trends into account, it should be recognised that the problem of youth unemployment and their marginalisation in society is no longer mainly quantitative in character. It is therefore indispensable to place more emphasis on the qualitative aspects of their preparation for working life, in order to facilitate their entry into the mainstream of present and future society.

If, in our discussions, and in the Declaration on which I hope we shall be able to agree at the end of our deliberations, we record our will to advance, each in our own national circumstances, towards solutions to these common problems, our meeting will not have been in vain.

Theme I

EDUCATION POLICIES IN THE CONTEXT OF SOCIAL AND ECONOMIC TRENDS

Note for discussion

Introduction

The development of education in the OECD countries is strongly influenced by the recent and anticipated changes taking place in the general social and economic situation. These changes have sharpened some of the uncertainties and constraints that traditionally beset education, but have also given rise to new needs, challenges and possibilities to which education has to respond. It is in this context that new orientations and strategies for the development of education systems are currently being discussed in the OECD countries.

The Common Challenge

Discussion of the future of education must be anchored in an understanding of the nature and irreversible consequences of the massive growth of education during the 1960s and the early 1970s. During this period, relatively high rates of economic growth and rapid social change in the OECD area accelerated the demand for educational opportunities; the rapid growth in public revenues and in personal incomes made it possible to meet this demand; and the needs of the economy for skilled and highly qualified manpower provided both a stimulus and the outlet for the explosive rise in educational levels and aspirations. Thus, economic growth, educational expansion and, to a more limited extent, social equality all advanced together. Educational growth also gave rise to major reforms in the structure of education systems and changes in the content and methods of education. These took place in the OECD countries at different times and with different degrees of success, but to a significant extent all the OECD countries advanced along the same road towards a broadening of the social bases of education.

Many of the problems arising from this move towards "democratisation" — whether in terms of the social composition of the pupil population or of the efficacy of the pedagogical process itself — still wait to be solved. But today it seems clear that the education systems in advanced industrialised societies face a new — and to some extent a common — challenge:

- the 1973-75 recession, and the subsequently faltering economic recovery, have undermined public confidence in the value of continuing educational expansion and the capacity of the economy more or less painlessly to absorb rising levels of education among the population as a whole;
- at the same time, the persistence of inflation, the restrictive budgetary policies adopted by many Member countries and the competing claims of other social sectors for public money are slowing down the growth of educational expenditure. When to this is added the decline in enrolments in

compulsory schooling resulting from the diminution in birthrates since the mid-sixties it is evident that educational services will be operating under conditions of contraction over the medium term;

- as the economic recovery proceeds, it becomes apparent that structural changes in employment levels and patterns are taking place, one consequence of which is the growing marginalisation of youth, which carries with it social and political dangers for the future;
- further, as educational failure and the burden of unemployment continue to fall most heavily on disadvantaged groups, there is a more realistic awareness as to the limitations of education in itself as a main instrument of equality of opportunity with which it had been associated in the 1960s;
- the rapid expansion of education, and the enormous complexity of education "systems"—whether in unitary or federal nations, centralised or decentralised—has in many cases led to a "crisis of management" which is parallel to that in other sectors of "big" government.

Taken together, these problems appear to be leading in many OECD countries to renewed political debate about education, amid a growing lack of consensus about educational purpose, some groups pressing for a return to traditional educational values, others seeing the answer more in increasing resources for the disadvantaged and widening education to meet the needs of new client groups, such as working people who need to adapt to economic changes or adults with "quality of life" aspirations. Indeed, the Analytical Report by the Secretariat (Part Two) suggests that education, far from being a shrinking domain of public activity, is likely to be the subject of new and pressing demands. This was also one of the main conclusions of the report of the Group of Experts on *Educational Policies and Trends* (1977). Thus, the issue may not be whether education is a declining sector of public activity, but whether it can be responsive enough to meet these new demands by co-operation with other institutions which can contribute to the response to these new needs.

Ministers may therefore wish to use the occasion of the first meeting of the OECD Education Committee at Ministerial Level to:

- clarify the nature of the current main educational problems in the OECD countries;
- agree to some broad principles which express the common concerns of the advanced, industrialised societies of the OECD and their determination to move towards solutions;
- point to specific directions in which a constructive and concerted response could be made.

Elements of Response

Each country needs, of course, to find its own solutions, though most of the problems are common and solutions in one country increasingly affect others. The issues set out below are focussed on education policies over the next few years and as they relate to the likely economic and social development in the OECD countries. In the most general terms, the points of departure for discussion could be:

- even if sustained economic growth is achieved in the next few years a return to the expansionist pattern of the 1960s is somewhat unlikely, and it is clear that a situation of full employment will be achieved only gradually;
- the OECD countries are now entering a period of structural adaptations within the world economy in which great demands will be made on the inventiveness, adaptability and high levels of skill and knowledge of the OECD populations;

- — these qualities are unlikely to be sustained and developed if basic educational and social aspirations, particularly of young people, are frustrated by high unemployment, for which education is neither the main cause nor the main remedy;
- — in addition, strong social pressures will continue to operate for improvements in the quality of life and of working conditions, in the participation of individuals in decision-making and in the reduction of disparities among social groups and regions to which education itself must become increasingly responsive.

Arising from the above, it is suggested that Ministers may wish to consider the following priorities to which educational policy needs to be directed over the medium term:

I. Enhancing the quality of education;
II. The pursuit of equality of educational opportunity;
III. Combating the marginalisation of young people;
IV. The development of democratic and efficient management of the education system.

I. ENHANCING QUALITY

The pause in the growth of traditional demand for education should provide the opportunity for a concerted effort designed to consolidate and reinforce the qualitative improvement of education, particularly in terms of:

a) the maintenance of educational standards and the provision of basic skills;
b) strengthening the morale, competencies and status of teachers.

a) The Maintenance of Educational Standards

One view of the present challenge is that, having gone through a period of rapid expansion, education, particularly that which is concerned with primary and secondary schooling, should now concentrate on its basic task of equipping children with fundamental reading, linguistic, mathematical and other skills. This position does of course presuppose that there is a clear answer to the question of what basic skills are needed, and how the effectiveness of the education system in providing them can be assessed, in view of the changing needs of rapidly evolving technological societies. It is evident that the rapid democratisation of education has meant that some children are not getting the kind of education to which their parents aspire. It is also clear that, in spite of marked improvements in teacher-pupil ratios, teacher qualifications and quality of educational facilities, the phenomenon of educational failure is increasingly perceived by many groups as an important issue.

Children must obviously be able to read, write and count as an essential element in their personal development. But they also need broader preparation for active social roles, and the role of education in this depends on social philosophy and political choice. Ministers, therefore, may wish to underline that the need at present is not so much for structural reforms as for the clarification of educational goals and standards and of the corresponding changes in basic education, in terms of curriculum reform, approaches to the teaching/learning process, opening of the school to its environment and community and new relationships between teachers, parents and other agents concerned.

b) The Status and Responsibilities of Teachers

The quality of the teaching force remains the ***sine qua non*** of the effectiveness of schools and of the way in which the educational service discharges its responsibility to the community. Increasingly, teachers have to provide services to the community which are beyond the traditional teaching role. Yet in some countries at least, teachers see their status, rewards and morale as having relatively declined. This may be partly a consequence of the great recruitment drive undertaken by governments in the post-war period to meet the needs of rapid expansion in enrolments. In any case, the growing professionalisation of the teaching force could be seen as a reaction to this situation. It could also be seen as part of a defensive retreat into traditional roles. How to maintain and improve the quality of teaching staff and how to sustain and enhance their motivation will be a crucial educational problem in the years ahead. The question arises because of the contraction of the profession consequent on diminishing school enrolments, leading to smaller intakes, to a raising of the average age of teachers and to fewer opportunities for advancement. New and imaginative approaches will need to be developed, in consultation with all the parties concerned, to maintain the vitality of the profession, to sustain the diversification of teacher roles, their capacity to develop differentiated teaching methods and to overcome the failure of the school to interest and motivate *all* groups of pupils.

Given the different legal, social and economic positions of teachers in the OECD countries, it is difficult to formulate common policy approaches to this problem. But the following elements are put forward as a basis for discussion by Ministers:

- the remuneration, conditions of work, career opportunities and status of the teaching profession should not be allowed to lag behind other parallel professions. (One of the consequences of this in the past has been that teaching tended to become unduly feminised, while women continued to be under-represented in senior positions of teaching or management responsibility);
- in exchange for improved career opportunities, with more movement between the several levels as well as with other sectors of activity, teachers should be ready to accept co-operation with other professional groups and an appropriate broadening of entrance requirements into the profession;
- if teachers are to be expected to assume additional and more varied responsibilities for guidance, extramural activities and liaison with community and economic institutions, their conditions of work should be reviewed so that occupational and psychological stress is eased;
- a prerequisite to such changed roles and tasks for teachers would be improvement in their qualifications by means of coherent education and training programmes in which in-service training, mostly school-focussed, would play a key role.

II. THE PURSUIT OF EQUALITY

Questions of educational equality cannot be considered in isolation from the role of the education system in relation to social equality. Several objective features of the present situation emerge clearly from all analyses:

- despite the considerable social benefits of educational democratisation since World War II, a fairly wide dispersion of educational advantages remains a feature of high income, technologically-based societies, dependent for their economic success on managerial, technical and professional elites;

- whilst OECD countries have registered considerable successes in redistribution policies, the effect of economic recession has been to underscore the stubborn and even chronic nature of combined educational, labour market and economic disadvantage concentrated on specific groups of population in most countries;
- the reduction of inequalities within the education system comes up against the rigid links which bind educational careers to professional positions and status and the consequent selection which is exercised by certification and credentialling practices in education;
- the guarantee of a minimum level of resources is not in itself sufficient to ensure the integration of certain socio-economic groups; educational measures for the reduction of inequality must be co-ordinated with measures in other areas of social policy.

The implication of the above would appear to be that the attempt to promote social equality through the *general* extension of educational opportunities should in the future be supplemented by the targeted approach to specific disadvantaged groups that several Member countries have already adopted. Indeed, Ministers might wish to consider the idea that now that most of the OECD countries have achieved adequate levels of education to satisfy general needs, the opportunity should be taken to give effective priority to the disadvantaged as such.

It is suggested that consideration of this issue would involve:

- a clear commitment to the objective of a more equitable distribution of educational opportunities and to the development of an equality-oriented education system;
- special aid, including measures of positive discrimination, to assist different disadvantaged groups to learn how to shape their own lives and to be brought into the mainstream of society—the social cost of such special aid being lower than that caused by the need for later measures of rehabilitation;
- a re-examination of measures needed to lessen the effects of current methods of selection, certification and screening within education systems, by means of more flexible and continuous ways of acquiring capitalisable qualifications;
- a redefinition of educational opportunities which will apply not to a given phase of existence, but the individual's whole life-cycle, such as is implied in the concept of recurrent education.

III. COMBATING THE MARGINALISATION OF YOUNG PEOPLE

A high priority for all countries will be to avoid a situation in which increasing numbers of young people remain outside the mainstream of social and economic life. The issue raised here is the broad one of the conflict between the accelerated political and social emancipation of young people on the one hand and their potential relegation to subordinate economic and other roles in society on the other. Political authorities in the field of education clearly have a major stake in contributing to the search for solutions to this problem.

Education cannot, except marginally, be planned to respond to economic cycles, nor can it be held responsible for persisting high levels of unemployment among the young. On the other hand, because it is a main source in the provision of occupational qualifications, the education system has an important role to play in reducing the risks which active members of the population, particularly young people, find themselves facing in employment. There is an acknowledged use of education and training to regulate cyclical fluctuations in employment and of financial incentives to encourage the unemployed to undergo training or retraining. The onset of structural unemployment, however, poses this problem in a new light. More than in the past the education system has to take account of the evolution of the employment situation because the young unemployed are often those who leave education with the lowest qualifications. Education systems may thus be required to retain young people who would normally have gone into the labour market; the challenge will be how to provide for these people coherent and adequate opportunities for education and training which can be seen to be useful for a job rather than merely as a "parking" device.

It seems unlikely that this can be achieved without some restatement of the responsibilities of the public—including educational—authorities towards youth and of youth towards society. The Communiqué of the December 1977 High-Level Conference on Youth Unemployment[1] refers to the view of some countries "that a social guarantee of education, training or work for all youth constitutes an objective to be achieved in order to ensure their meaningful integration into working life". While recognising that effective measures to attain this objective would need to be concerted with other governmental agencies and the social partners, Ministers may wish to discuss the feasibility, in principle, of introducing a social guarantee from the particular standpoint of the public education authorities. Specific proposals to assist young people who are unemployed or at risk of being unemployed are presented in the Note for Discussion on Theme II.

There will, in any case, be need for adjustments in the relationship between educational qualifications, occupational requirements and income differentials as the supply of qualified people increases relative to the demand for their services. Whatever the responses from the side of the education system, adaptation of occupational structures, of job content and of management methods also seems necessary to meet the aspirations of an increasingly educated youth population. This process of mutal adjustment between education and work will need to be sought by co-operation between employers, trade unions and governments in such a way as to reconcile economic efficiency with the social objectives involved.

IV. DEMOCRATIC AND EFFICIENT MANAGEMENT OF THE EDUCATION SYSTEM

The above analysis of the issues suggests the fundamental dilemma facing those with responsibility for education: growing pressure for specific educational attainments by children and young people; and yet a seemingly irreversible tide of new responsibilities for child-care, vocational guidance, further education and training and preparation for leisure and retirement. The answer to it may be all the more difficult to find because it appears unlikely that education can count on an increasing share of the

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[1] *Youth Unemployment, Vol. I, A Report on the High Level Conference, 15-16 December 1977,* OECD, Paris, 1978, p. 91.

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public purse. But favourable demographic trends will reduce the pressure on the schools if resources are efficiently *redeployed* in response to declining demographic pressures on school enrolments. And even within the existing pattern of deployment new management techniques, the readaptation of rigid school timetables, and more co-operation with outside institutions could promote the more efficient use of resources.

Ministers may wish to consider three possible responses to this challenge:

i) clearer definition of the goals and responsibilities of the public system of education;

ii) in several countries considerable devolution of decision-making and management to local levels already obtains; in others increased devolution would seem desirable so as to promote effective participation by all concerned, improved use of resources and flexibility of development while maintaining a coherent national education policy;

iii) more acceptance by the established educational authorities of the role that other institutions can play.

At all events, it does seem clear that education can only be an expanding enterprise if more diversified clienteles, resources and organisation are engaged in the process in some form of co-operation. One major task of national educational policy in the future may well be to provide the framework for such co-operation.

Theme II

EDUCATION AND WORKING LIFE : THE CONTRIBUTION OF EDUCATION TO PREPARATION FOR WORKING LIFE AND THE TRANSITION TO EMPLOYMENT

Note for Discussion

The General Context

The concern to bring education and working life into a closer relationship arises from several causes. The great expansion of education in Member countries since the early 1960s has significantly increased the proportion of people in the labour force with higher levels of educational attainment and has raised expectations and aspirations for jobs, careers, social status and opportunities for personal satisfaction and development. Yet the overall structure of employment in the economy, the content of jobs, working conditions and modes of management have not developed to match these higher levels of education and aspiration. One consequence of this has been that individuals are increasingly led to reduce the professional expectations formerly linked to a certain level of education or to a particular degree or diploma. At the same time educational expansion did not in many countries lead to any significant reduction in the numbers of young people who leave the education system without adequate vocational preparation or qualifications.

The serious check to the rate of growth of employment and field capital which has occurred in most Member countries in recent years has set additional limitations to opportunities for the utilisation of rising educational levels of the labour force. The problem could well be aggravated in the future: the average educational level of the labour force will be further raised by the retirement and death of the older age groups whose average levels of education are relatively low; and the total stock of skills and abilities will also continue to be raised by the cumulative effects of improvements in the quality and distribution of education, extended training programmes for youth and the expansion of education for adults.

This maladjustment between education and working life has been dramatically highlighted by high levels of unemployment among young people. Whilst the problem of youth unemployment cannot be fundamentally solved without a return to full employment, which is essentially the responsibility of economic and manpower policies, its onset has nonetheless precipitated widespread public concern that many young people are being inadequately prepared by the schools for jobs and working life roles generally. In addition, there are increasing pressures on education to co-operate with manpower authorities to facilitate the transition of young people to employment, and to meet new needs for training and retraining.

Preparation for Working Life and Transition to Employment

The above considerations, which are discussed in greater detail in the report *Education and Working Life* (OECD, 1977), provide the background against which Ministers are invited to consider a number of specific problems concerning the contribution that education can make to the twin objectives of preparing people for working life and facilitating their transition to stable employment.

While the education system at all its levels is concerned with both preparation for working life and the transition to employment, there in an important distinction that needs to be made at the outset. Preparation for working life in a broad sense should be part of the foundations of a life-time career and contribute to the development of competences, qualities and attitudes which enable individuals to be effective and adaptable in the face of change: as such, it should be one of the basic purposes of education, particularly of compulsory schooling. Transition to employment, on the other hand, concerns the process of moving from school into stable work (in many countries beginning already at the end of compulsory schooling), and involves the acquisition of the specific skills and qualifications needed to get and keep a job; this cannot be a responsibility of education alone. In fact, the transition to employment has become a growing sphere of overall public responsibility, in co-operation with employers, trade unions and other groups in the community. This underlies the efforts which are being made in many countries to bring education, training and employment policies and agencies more closely together.

The need for such a collaborative policy approach to education and working life arises from individual, economic and broader social purposes. In general, OECD societies recognise a right to work and the responsibility of individuals to support themselves and contribute to the community. If the community expects people to work it has an obligation to equip them to do so. It is an inescapable reality that most people have to support themselves through work and that it has become more difficult to survive in a competitive labour market, particularly for those who are educationally disadvantaged. Economic capacity and productivity depend on the renewal and development of the skills of the labour force, the mobility of workers within and among enterprises and among sectors of the economy, and the ability of individuals to design, control and operate new techniques of production and new ways of organising work. This role is likely to be even more crucial in a period of reduced economic growth and in the context of a new international division of labour in which the OECD countries would tend to give even greater priority to the development of "knowledge-based" industries and services.

In discussing appropriate responses by the educational service to the complex issues stated above, Ministers may wish to consider the following areas as constituting the priorities for policy action:

I. Preparation for working life during compulsory schooling;
II. Educational needs of those who enter the labour force before the end of upper secondary education;
III. Reform of upper secondary education;
IV. Reorganisation of higher education;
V. Career education and occupational guidance.

I. PREPARATION FOR WORKING LIFE DURING COMPULSORY SCHOOLING

The current debate in Member countries about the purposes of basic education, and of society's expectations concerning its outcomes, provides a backdrop for this discussion. In most OECD countries compulsory education now covers the primary and lower secondary school levels. A significant proportion of young people—ranging between a few per cent and two-thirds (leaving aside those who enter apprenticeships)— enters the labour force directly from compulsory education. But the main objective of this level is preparation for further study rather than for working life. Those who leave tend to be disadvantaged in terms of social status and jobs and they contribute disproportionately to the ranks of the unemployed. Conversely, the better the preparation given to pupils before the end of the compulsory schooling, the less willing they are likely to be to accept routine, unrewarding jobs.

A major issue is thus raised by this dichotomy: how to achieve more equal life chances between those who leave and those who continue their studies. The problem is further complicated in those systems where pupils are sent to different types of schools from the outset of lower secondary education, most notably when certain secondary schools are largely devoted to vocational training. Future career options and attitudes towards working life may thus be prematurely, and often irreversibly, determined. It is less obviously so when lower secondary education is organised on the comprehensive school principle, reflecting the fundamental purpose of compulsory education in providing *all* pupils with basic skills and competences as part of a common educational experience designed to prepare them for a useful role in society, including working life.

Ministers may wish to consider the possibility of drawing up an agreed minimum list of such competences needed in working life, for both boys and girls, which could include:

i) ability to read, write and communicate orally;
ii) competence in the four arithmetical rules and in some applications such as percentage calculations;
iii) command of manual skills;
iv) social skills, such as ability to work with others and participate in the corporate life of an organisation;
v) ability to learn and go on learning;
vi) ability to cope with uncertainty and complexity.

In addition, Ministers may wish to consider a number of more specific questions in relation to the need to provide all children with direct knowledge of the world of work, including actual work experience. Beyond the introduction into the curriculum of material relating to everyday life and the world of work, and visits by pupils to enterprises, to what extent would it be feasible to introduce periods of work for pupils in lower secondary education as a valid learning experience? How could teachers be encouraged and enabled to acquire better knowledge and experience of working life outside the educational sector? Could the functions of the teaching personnel be widened so as to make possible the recruitment of a proportion of school staff with experience of production, administration, commerce, etc.?

For those systems in which a significant proportion of children leave school at the end of the compulsory school-leaving age, further problems are posed as to the advisability, nature and timing of the introduction of a specific vocational education component in the curriculum. Ministers will wish to consider this matter in relation to the broader question of the balance between a core curriculum and optional studies tailored to the different needs of the pupil population; the dangers inherent in such differentiation because of the impossibility of avoiding socially based and irreversible selection; the role of careers education, of guidance, orientation and methods of assessment.

II. EDUCATIONAL NEEDS OF THOSE WHO ENTER THE LABOUR FORCE BEFORE THE END OF UPPER SECONDARY EDUCATION

As indicated above, in many OECD countries there is a sizeable proportion of young people who leave school before the end of upper secondary education, who remain educationally and socially disadvantaged and who alternate between unemployment and low paid, unskilled or unstable jobs. They remain poorly motivated and are not represented among those who seek to stay on at school in times of youth unemployment. Ministers may wish to consider the idea that, for both social and economic reasons, society has a responsibility for providing *all* young people with a full vocational or professional qualification utilisable on the labour market, upon which their further education and retraining may build. Such an objective would require the acceptance of relevant commitments by employers and trade unions.

The issue is whether governments would wish to give priority to those at the bottom of the educational qualifications scale, particularly when that position means a high risk of unemployment. If Ministers agree to such a priority, would they also agree:

a) that young people who leave school before the end of upper secondary education should receive assistance or support in obtaining an attested vocational qualification comparable with that received by their contemporaries remaining within school;

b) that effective guarantees and obligations should be established for continued training and subsequent educational opportunities for those who choose to leave school before the end of upper secondary schooling, possibly as part of a policy of "recurrent education" for youth?

A number of options of this kind are in fact being tried out in Member countries: e.g. combinations of employment and training or further education under the "dual" system in Germany; special opportunities for school-leavers who are unable to find a job (United Kingdom); a social guarantee of opportunities for employment training or education for all young people aged 16-19 years (Nordic countries), etc. Ministers are invited to consider to what extent such policies may in fact represent a more realistic approach to the problem of early school-leavers than one based on an extension of the period of compulsory full-time schooling beyond the present limit of 16 which prevails in most Member countries.

III. REFORM OF UPPER SECONDARY EDUCATION

In conjunction with the above measures the reform of upper secondary education (16-19 year age group) continues to be a high priority. This is the level at which there is still considerable potential for quantitative expansion in most Member countries because of both demographic factors and growth in enrolment rates, which is being accelerated by the tendency of young people to stay in school because of the current employment situation. There is also evidence of increased demand both from young people and adults for shorter training schemes at this level, resulting in vocational qualifications, rather than for longer courses leading to a general diploma qualifying for entry into higher education.

This is also the level within the educational system at which social selection operates most manifestly, further reinforced by recent trends to decrease selection at compulsory school level and to increase control over access to higher education. Therefore, choice of branch or stream of study by pupils and their level of performance determines to a large extent decisions as to whether to proceed or not to higher education and the line of future study or work. Because of the traditional dominance of the academically oriented branches of study, selection by employers among those who enter the labour force at the end of this stage has been on the basis of academic credentials rather than criteria directly relevant to employment.

Ministers may wish to discuss what should be the main objective of reform of this level of education. This could be to provide a wider and more realistic range of study options whilst at the same time decreasing the hierarchical distinctions between general and vocational education and the irreversibility of choices. These more diversified opportunities should not only cover a wider range of streams and subjects available, but also make possible a variety of patterns of study which could facilitate different combinations of work and study, including the possibilities for part-time work and part-time schooling. "Alternation" between education and work, including community service, would thus be encouraged as a basic feature of upper secondary education. The practical implementation of such a policy would again call for close collaboration between the educational authorities and the social partners.

IV. REORGANISATION OF HIGHER EDUCATION

The trends in upper secondary education noted above, together with the increased concern over the employment prospects of higher education graduates, will have significant repercussions on the organisation of the post-secondary education sector. Ministers are invited to consider two specific priority issues in this area:

- *i)* *Reorganisation of Access.* There will be an increase of applicants with more diverse educational backgrounds and qualifications, many of whom will wish to return to education after a period of employment or will expect to combine work and study. For broader social reasons many governments will themselves be encouraging a bigger proportion of adults to enrol in institutions of higher education. Entry qualifications will therefore need to be more broadly defined. In particular, work experience and other kinds of competences and skills acquired outside the formal education system would need to be recognised as relevant criteria for access.
- *ii)* *Reorganisation of Study Courses.* Pressures coming from the interests and needs of the new groups seeking access as well as from the needs of the labour market converge on the need for greater diversity and flexibility of study provision, i.e. courses of shorter duration, more problem- or vocationally-oriented, organised on a modular or part-time basis. The development of such courses will involve the co-operation of industry, trade unions and other community representatives and corresponding arrangements for educational leave of absence.

A specific problem arises for those fields of study—such as the humanities, social sciences, liberal arts, etc.—which, having grown in response to heavy employment needs in the public sector and the education system itself, are now facing the most serious employment outlet difficulties, the absorptive capacity of the sectors in question having been drastically reduced. This problem affects particularly the university system. The question which Ministers may wish to consider is to what extent can universities respond to these changing needs? In particular, to what extent can they provide a more balanced type of course, better suited to employment prospects and more likely to facilitate the transition to a stable job, but without damage to quality and standards? Or, should these needs continue to be met primarily by other institutions outside the university system?

V. CAREER EDUCATION AND OCCUPATIONAL GUIDANCE

Ministers may wish to consider to what extent the role of career education and occupational guidance demands specific attention. Today it is generally recognised that the young should be:

- made aware from an early age of basic work values and given some impression of what working life is like;
- given explicit information and advice about their future career choices on a continuing basis from about the age of thirteen;
- given practical assistance in seeking a job when their initial education comes to an end.

Yet it is evident that on the whole the resources for achieving these three objectives are inadequate: there is, in general, at all educational levels a shortage of trained staff with the specialised knowledge and counselling skills required to give young people an introduction to the world of work and constructive advice about their career choices; there is also often a lack of co-operation between "careers" teachers and officials in Ministries of Labour, which are the public agencies usually charged with responsibility for job placement.

Among ways and means of strengthening the role of career education and occupational guidance Ministers are invited to consider the necessity of ensuring that:

- there is an adequate number of career education counsellors in each educational institution;
- ample provision is made for regular in-service training courses so as to bring counsellors up to a high-level of expertise and to update continually their knowledge of labour market trends;
- effective machinery be instituted for guaranteeing day-to-day co-operation between counsellors, job-placement officers and representatives of employers and trade unions.

COMMUNIQUE

The first Ministerial-level meeting of the OECD Education Committee was held in Paris on 19 and 20 October 1978 under the Chairmanship of Mr Aaron Païs, Minister of Education and Science (Netherlands). The Vice-Chairmen were Mr Jaakko Itälä, Minister of Education (Finland), and Mr Ernest L. Boyer, Commissioner for Education, Department of Health, Education and Welfare (United States).

Ministers welcomed the fruitful consultations with the Business and Industry Advisory Committee (BIAC) and the Trade Union Advisory Committee (TUAC) prior to the meeting and the constructive statements provided by them on the main themes under consideration.

Ministers focussed their attention on two major issues:

a) how to raise the overall quality of education and to continue to widen access to educational opportunities against a background of economic uncertainty and structural change;

b) how to reinforce the role of education in preparing the young for working life and facilitating their entry into employment.

Ministers were satisfied that the considerable expansion of education since the early sixties had gone far to raise the general level of education in society and had considerably reduced educational inequalities. Unfortunately, in many OECD countries some disadvantaged groups are still not able to benefit fully from the education offered, and this faces the authorities with a major task of providing such groups with education better adapted to their needs.

The economic difficulties of the 1970s, together with growing concern of governments about the very rapid increase of total public expenditures on the social services, including education, had created two additional major problems. The first was the financial restrictions imposed upon further educational growth, which often necessitated the reordering of priorities. The second was the contraction of job opportunities. This had led to many young people in the OECD area as a whole being unemployed. Although not responsible for this critical situation, education systems in many countries were exposed to strong public pressure to respond to changes in the labour market and to help young people to acquire employable skills and competencies. It was noted that some governments had undertaken the obligation to offer alternative educational, training or work opportunities to all young people.

Ministers concurred that education, which serves plural aims, should not be constrained in reaction to short-term external factors. Nevertheless, it must be flexible enough to respond imaginatively to emerging social and economic demands bearing in mind economic constraints. Against this background, Ministers adopted the following Declaration on Future Educational Policies in the Changing Social and Economic Context.

Ministers stressed the need for increased educational exchange and co-operation between Member countries, including expanded facilities for young people to have access to education and training experience in countries other than their own. They expressed their appreciation of the long-standing co-operation of their governments in the field of education within the framework of the OECD and welcomed the present opportunity to discuss common issues and problems in the Education Committee at Ministerial Level and they expressed the wish to have such meetings again at suitable intervals. They invited the OECD to review as necessary the development of the policy orientations set forth in the Declaration and to bring new findings to the attention of Member countries as appropriate.

DECLARATION
ON FUTURE EDUCATIONAL POLICIES IN THE CHANGING SOCIAL AND ECONOMIC CONTEXT

Ministers of Education of the OECD Member countries, and of Yugoslavia, meeting in the framework of the Education Committee of the Organisation,

Recognising that, in response to new economic and social conditions within the OECD area and changing economic relationships with other countries in the world, Member countries are now in a process of adaptation which requires, on the one hand, the restructuring of industry and the creation of more skilled jobs, and on the other, more knowledge, higher intellectual capacities and occupational skills, and greater inventiveness and flexibility throughout the population;

Recognising that there is a common desire to improve the quality of life for all, specifically by increasing individual responsibility in the various walks of life, making intensive efforts to assist disadvantaged social groups and encouraging the participation of individuals in lifelong learning;

Recognising that persisting high unemployment in the OECD area as a whole, which weighs with particular severity upon the young in many countries, calls for a vigorous response from education in collaboration with other social and economic powers which apply in certain Member countries, with respect to educational matters,

Recognising that the fundamental purposes of education must be upheld and continuously developed for the general good, so as to provide all, young and adults, with:

- the basic knowledge, skills and the capacity to develop attitudes needed for their personal development and in their roles as individuals, family members, workers and citizens;
- the access to culture needed to lead a fuller life in an increasingly complex and interdependent world;
- the capacities to contribute creatively to social and economic change;

Recognising that constitutional or institutional arrangements have implications for decision-making in educational policies that vary from one country to another,

Having regard to constitutional constraints and/or exclusive jurisdictional powers which apply in certain Member countries, with respect to educational matters,

DECLARE

A. That, in the light of the changing economic and social context, they agree that the following aims deserve priority consideration in the formulation of policies in the Member countries and Yugoslavia:

i) to promote the continuous development of educational standards, as conceived within each country, and to ensure that all young people are helped to acquire the basic competencies needed to embark successfully upon adult life;

ii) to develop schools as active communities which offer a stimulating environment, contributing to the self-reliance, sense of responsibility and co-operative spirit of young people;

iii) to improve the professional preparation of teachers and to encourage them, in the context of changing needs and tasks, to take an even more active and responsive part in strengthening the links between the school and adult life;

iv) to adopt positive educational measures which contribute to the achievement of equality between girls and boys, women and men;

v) to adopt positive measures to enable migrant workers and their children to profit more fully from education and training opportunities, taking into account their special needs as appropriate;

vi) to adopt positive educational measures to promote equality for underserved groups such as the socially disadvantaged, immigrants and the handicapped;

vii) to ensure that any necessary procedures related to educational choice, assessment and certification take place in such a way and at such stages as to allow each pupil to develop his or her full intellectual and personal potential;

viii) to help the young to prepare more effectively for adult life and work, by working towards the best possible balance between general and vocationally-oriented education and encouraging the provision of opportunities for work experience during schooling;

ix) to stimulate the development of more "recurrent" educational opportunities for young people and adults to continue education at all levels after periods of work;

x) to facilitate the transition of young people to adult life and, in particular, to strengthen the contribution of education to solving the problem of youth unemployment, in co-operation with other authorities and groups concerned, including employer and trade union organisations, by:

- endeavouring to give all young people an opportunity to obtain a usable vocational qualification;
- expanding opportunities and providing appropriate means for unemployed young people to gain access to further education and/or specific training;
- encouraging improvements in the structure of work;

B. That the pursuit of these aims calls for efficient use of the resources made available to the educational sector, for continued improvement in the functioning of educational services, and for maintaining education as one of the most important sectors in public budgets;

C. That the pursuit of these aims calls also for closer co-operation between all those involved in education—the authorities, teachers and parents and the students themselves—as well as employer and trade union organisations and other concerned groups in society, in a united effort to sustain a just, broad-based and dynamic education service, and to draw on its potential for building a creative society and prospering economy.

Annex 1

COMMENTS

SUBMITTED BY THE BUSINESS AND INDUSTRY ADVISORY COMMITTEE

for the consultation on 18 October 1978

I. INTRODUCTION

BIAC would, at the outset, wish to express its appreciation to OECD for the invitation to submit its views for the meeting of OECD Education Ministers and, particularly, for being given the opportunity subsequently to discuss these views with the Ministers themselves.

Over many years, BIAC has striven to establish closer working relations with OECD across the broad range of interests which concern BIAC member organisations. Education is an important one of these, and BIAC has received a growing responsiveness to its overtures on the part of OECD, which has itself initiated many new and welcome approaches towards closer relationships with the social partners in this important area.

This led to BIAC and the Trade Union Advisory Committee (TUAC) being invited to participate in the OECD inter-Governmental Conference on Vocational Education and Training in July 1978. The occasion of the Ministerial meeting can perhaps be seen both as a fitting culmination to a long series of consultations, discussions and other activities between BIAC, TUAC and the OECD Secretariat, and as a prelude to further practical collaboration and work between the three parties.

II. GENERAL OBSERVATIONS

BIAC has studied with great care the two Notes for discussion on " Education Policies in the Context of Social and Economic Trends", and "Education and Working Life: the Contribution of Education to Preparation for Working Life and the Transition to Employment".

BIAC welcomes the clear and frank understanding which is shown in these notes of the problems facing OECD countries and, particularly, the political awareness and reality with which they are presented and discussed. It also welcomes the concern evidenced in both notes to bring education and the world of work into a closer relationship and thereby to achieve a better understanding of the aims and objectives of each and of the constraints within which they must inevitably operate. While forward-looking in many important respects, there is no attempt to push education or industry into false or untenable positions, but an opening up of avenues through which sensible and pragmatic lines of development can be explored.

BIAC is particularly pleased to see the theme of closer co-operation between education and the social partners running through these two documents. It would wish to reiterate its strong support for this, as it believes would TUAC also, and it would like to see more positive policies being adopted in this direction by the education authorities, at least in some countries.

BIAC appreciates the necessarily general lines along which the documents deal with the various issues at this stage, which will leave many aspects to be more specifically handled in future discussions. It therefore wishes in the remainder of this brief note to identify certain specific areas in which its discussions with the Ministers might be developed.

III. SPECIFIC COMMENTS

A. *Education Policies in the Context of Social and Economic Trends*

BIAC finds that it can go along with much that is said in this document both from the standpoint of its analysis of the problems and with regard to the main issues on which discussion should be concentrated. It would particularly support, with qualifications in some cases, the following points:

a) The recognition given to the needs of the economy for skilled and highly qualified manpower. However, insofar as industry is concerned, the need is not always so much for highly qualified people in disparate disciplines as for those with qualifications, experience and aptitudes which are relevant to the requirements of a constantly changing industrial and business environment.

b) The clear awareness of the limitations of education as an instrument for achieving equality of opportunity in social and other spheres.

c) The priority given to enhancing the quality of education at all levels.

d) The importance attached to pursuing equality of educational opportunity. However, as a corollary to this, the education system and its offerings must be diversified to a much greater extent so as to cater for wider and more different needs amongst young people and adults alike.

e) The need for more democratic and efficient management of the education system. With its long experience of management education, training and development, industry can offer advice and guidance on managemnt needs, and stands ready to participate in the working of the educational machinery where appropriate.

f) The necessity for clarification of educational aims and objectives. Industry would like to see a closer reconciliation between the broad goals of teachers related to the personal and social development of the individual and the more specific requirements of employers in terms of the demands of working life.

g) The call for maintenance of educational standards and improvement of basic education skills. Here industry recognises that it has an important part to play in clarifying its requirements from the education system in terms that make curricular sense to teachers.

h) The case for widening of curriculum approaches in schools. Industry can make a substantial contribution to this development through joint discussions and such means as work experience, project work and other link activities developed with teachers.

i) The demand for improved qualifications and in-service training of teachers. This should include experience of the world of work outside of education, particularly industry and business.

BIAC would, however, wish to express some misgivings or enter certain reservations in respect of some matters, particularly:

a) The case for positive discrimination in favour of disadvantaged groups will need to be based on clear and generally accepted criteria in each country as to the categories of people covered, and full account taken of the opportunity costs in diverting scarce resources to this end. There is much to be said for tackling this problem more thoroughly at the earliest stage of development through the reinforcement of the primary education systems.

b) The tendency to undervalue the importance to industry of traditional and impartial assessment and examining methods in education. Employers attach great value to sound credentials and qualifications as evidence of scholastic achievement, a guide to selection and an indicator of potential ability and competence.

c) The feasibility and practicability of attempting to provide indefinable and unrestricted social guarantees of education, training or work for all young people without first closely examining the total dimensions of the problem, the cost implications and the logistic requirements, as well as assessing the results of existing schemes.

d) The very limited extent to which industry can in practice adapt occupational structures, job content and management methods to meet the aspirations of better educated youth. However, the full recognition of the need to reconcile economic efficiency with social objectives is welcomed by employers.

e) The considerable limitations within which industry and business can improve the quality of working life in the face of ever growing demands for cost efficiency and competitiveness.

f) The practical reality of restructuring entire education systems and invading established working arrangements in order to widen educational opportunities, which can be, and is being, largely achieved through the adaptation and extension of existing adult and further education facilities.

B. *Education and Working Life*

Although taking the point made in this document about the creation through educational expansion of personal expectations and aspirations which have not been fulfilled in employment, BIAC cannot accept that the nature and form of jobs in industry and trade can or should be determined according to these criteria. This is not to say, however, that due and often increasing, account would not be taken of them in company manpower and personnel policies. Insofar as the increased output of graduates is concerned, there is clearly a natural limit in manufacturing industry to the number of jobs hitherto regarded as appropriate for graduates, which has not expanded, and is not expected to, as fast as the supply of graduates. This limit has already been reached in many of the larger companies and corporations, which means, if an increased graduate output is to be absorbed, an inevitable broadening of the range of employment for many graduates and an increased acceptance on their part of jobs below the traditional level. More graduates, particularly those with indifferent qualifications, will therefore have to be prepared to lower their sights on the employment market. This is not to say that industry and business cannot make use of their talents and abilities, but these will often have to be employed in less traditional areas of company operations. In other words, there have to be adjustments made on both sides if a better match between education qualifications and employment openings is to be secured.

BIAC would also question whether educational expansion has been fully suited to the needs of the economy and of industry and business in particular. There has been a growing mismatch in many countries between, on the one hand, the nature and range of ouput from the higher and further education systems and, on the other, employment and training requirements and opportunities. This calls for a better balance between student demand for courses and the changing pattern of demand for qualified manpower in all sectors of the economy. In more specific terms, industry believes that too few people take existing courses in higher education which have practical application, and that there should be less concern with unrestricted freedom of choice as the basis for providing higher education courses as a whole and more regard for courses oriented generally towards vocational needs.

Subject to these observations, BIAC would support many of the matters raised in this document, particularly:

a) The need for a collaborative policy approach to education and working life. Industry is more than ready to play its full part in this.

b) The emphasis on preparation for working life by the education system. This must not seek to conceal the fact that there are always bound to be routine, and sometimes unrewarding, jobs, which can in many cases have other compensations.

c) The recognition of the competences, qualities and attitudes necessary for employment requirements.

d) The range of fundamental competences which are needed in working life. There are obviously further qualities which could be added to such a basic list, and BIAC would wish to instance judgment and common sense; powers of discrimination; balanced outlook; willingness to perform to established standards and to co-operate with others; and a responsible attitude towards work, including such matters as safety, waste and efficiency.

e) The need for understanding of the world of work as part of the overall school process. Young people should also be made aware of the basic facts and workings of the democratic systems of government. In other words, they should understand the economic, social and political facts of life.

f) The necessity for school teachers to gain experience of working life outside of education. Industry in many countries has helped to bring this about on a limited scale.

g) The case for improved careers education and occupational guidance. Careers education should form an integral part of every school programme from the age of about thirteen. Informed vocational guidance, which should not be left to the very end of secondary education, should include not only the various possibilities and options in employment but also the implications of continuing in full-time education from the standpoint of employment openings and prospects.

BIAC would, however, have some reservations about certain matters, particularly:

a) The introduction in some countries of specific vocational education into the school curriculum. Policies on this vary considerably between different countries. However, where this does take place, BIAC is given to understand that it does not in practice create any particular problems over and above those which are common to most secondary education systems.

b) The alternation between school and work as a basic feature of upper secondary education. This is far too sweeping a suggestion and BIAC could only support limited or experimental developments in this area.

c) The responsibility of society to provide all young people with a full vocational or professional *qualification.* BIAC is much concerned at the implications of this in terms of the innate capabilities of the intended beneficiaries, the capacity of the education and training systems and the currency of the certificates eventually awarded. However, the provision of opportunities for all young people to receive some form of vocational preparation, whether through education, training or work experience, is a different matter, and the feasibility of this is under examination in some countries in the light of current experiments in this general area.

d) The reality of trying to provide guarantees and lay down obligations in respect of post-compulsory education and training.

e) The assumptions about unrestricted educational leave of absence by employers as part of any reorganisation of higher education. Employer policies, in which relevance is the guiding principle, are quite clear on this. Insofar as greater diversity and flexibility of study provision is concerned, account should also be taken of the considerable possibilities of educational technology, including the application of film, television, audio aids and programmed learning, in helping to meet the needs of a wider audience for higher education. This could not only improve teaching, but also reduce the costs of the proposed expansion of the higher education system by making it less labour intensive.

IV. CONCLUSION

BIAC would like to conclude this brief commentary on the same note on which it began by reiterating its strong support for the continuing efforts of OECD to get to grips with the difficult problems facing Member countries in the field of education, training and employment. The positive and constructive, yet mainly realistic, approach which it has brought to bear on these problems is evident from the documentation for the Ministerial meeting and from its action in ensuring that the voice of the industrial parties is heard at the highest levels within the Organisation.

It is to be expected that the meeting of Education Ministers will open up the way for further and more detailed discussions between OECD and BIAC and TUAC. For its part, BIAC would welcome such an outcome. The main course and thrust of events must, however, necessarily take place within individual countries. It is to be hoped that the OECD meeting of Ministers will provide a strong stimulus and a sound basis for these follow-up activites and that they will initially involve the same degree of high level participation.

Annex 2

COMMENTS SUBMITTED BY THE TRADE UNION ADVISORY COMMITTEE

for the consultation on 18 October 1978

I. INTRODUCTION

The goals of education are the development of individuals capable of living a full life, including their roles as citizens and workers. This requires that education develops the totality of basic aptitudes, including the necessary knowledge, skills and cultural qualities for personal fulfilment, including the achievement of satisfaction, in useful employment, by assuming responsibilities in work and social life.

Representing trade unionists, TUAC wishes to add to these objectives another one: to contribute to the securing and development of political and social democracy.

TUAC wishes to note that

- if these objectives are generally recognized, there is much to be done in order to make the actual educational system correspond to them;
- all these objectives are closely interrelated which means that education policy cannot be determined solely on the basis of the short-term economic situation;
- the educational system should not aim at developing elites. Economic and social development depends on the level of education of all members of society and not on the existence of an elite. Education is necessary for everyone; in particular it must give priority to those who for whatever reason—geographical, social or cultural—are in the most difficult positions and who are disadvantaged in society;
- in preparing young people to participate in society as citizens and workers, they must be encouraged to develop critical assessments. Education must not encourage acceptance of the status quo in society with all its inequalities and injustices.

It is only in the above-mentioned broad context that the trade unions can envisage the necessary development of more effective education for all. These questions cannot be isolated from the overall economic and social policy on which the trade union movement has expressed its common positions.

Education is an investment which has the support of society as a whole and, consequently, it has to benefit everybody. However, such an investment is long term. The changes that are necessary in educational policy cannot thus be reduced to responses to economic crises.

The needs to improve the educational systems vary considerably between different OECD countries. In most cases the main needs concern the non-mandatory areas of the educational system, such as nursery schools, upper secondary schools, vocational training institutions or adult education. In a number of OECD countries, however, the educational system as a whole does not even have the resources to meet basic social, cultural and economic needs. Consequently, the OECD should continue to pay special attention to the needs of these countries.

II. THE QUALITY OF EDUCATION

Improving the quality of education must address two fundamental questions. The first is the general problem of the curriculum. The degree to which it provides each child with a basic education, as well as its abilities to motivate young people, to prepare them for citizenship and to expose them to culture and knowledge of work. In urging curriculum reform to address these needs it is essential that particular attention is paid to the needs of ethnic minorities, the poor and disadvantaged, and those who are handicapped. One also has to develop programmes for the individual needs of pupils without segregation.

Given these priorities, it is important that the curriculum be comprehensive enough to integrate an emphasis on fundamental areas with the preparation for a life of work and democratic citizenship. This means that the following areas will have to be stressed:

- basic reading, writing, computational and life skills;
- an orientation towards the personal and social environment of students so as to increase student motivation;
- attention to the basic democratic principles that create a sense of responsibility for citizenship;
- cultural breadth and depth; and
- taking into account student needs by involving them in decision-making processes.

The second area of concern which must be addressed in discussing quality is that of resources. Resources must be adequate to enable education to meet its expanding responsibilities. It is necessary to ensure that education services are made without charge to parents or students wherever this is not yet the case.

Resources to improve existing services are essential. In many Member countries the educational sector has been asked to take on new problems, such as providing education for the handicapped, for students needing language training, and for the poor. Such services require additional funds even though they fall within the framework of the existing educational system.

In addition, new resources are needed to meet areas in which educational demand is expanding. The most obvious of these are early childhood or pre-school education, the upper secondary school level, and recurrent or adult and continuing education. In many Member countries there is a serious lag between the abilities of the educational sector to provide these services due to lack of resources, and the demand for them from the general population.

It must also be pointed out that expanding educational opportunity to those who have not had it previously should not be viewed as a threat to quality education. Each individual should be able to obtain the highest level of education he wishes and is able to achieve. The notion that quality education should be possessed only by elites cannot be accepted as an argument for keeping educational costs down.

The necessity for adequate resources must also devote attention to improved teacher training at both the pre-service and in-service levels. Since teachers are being asked to do more and more, the support services available to them must keep up with their needs. Some of these may raise their professional qualifications but some must be aimed at relieving their stress and fairly compensating them for their increased burdens. It is also to be underlined that the demographical changes in certain countries cannot justify a diminution of resources allocated for the teaching profession.

The two basic issues involving curriculum and resources both relate to the larger question of who should be responsible for delivering educational services. While co-operation between sectors must be encouraged, particularly to assist young people who have finished their basic education to move into the work place, the delivering of education is a question for the whole society and the responsibility for delivering it has to remain within the education sector, as a public service. Industry cannot expect the schools to take up the function of specific job training. Work experience programmes granted to youth through the school system must take this basic limit into account.

III. FOR A BETTER ENTRY OF YOUNG PEOPLE INTO WORKING LIFE

The first requirement of every Member country must be to provide every young person with a job, a vocational training place, or the opportunity to remain in full-time education. The preparation of young people for adult life must take account of their needs as citizens and workers. In particular such preparation should aim to enable them to undertake employment which gives them the sense of usefulness, dignity, and independence.

In order to facilitate this preparation the young person will have to receive, together with a general education, a general vocational education. This must allow all young women and men to become acquainted with the working world.

A young person's education should aim at assisting him to make his own career choices although in practice career choices are often very limited. It is necessary therefore to develop vocational education and guidance in order to give the young people the maximum of useful information on the impediments, advantages, difficulties, and the conditions of work in different occupations.

Education should not be geared towards merely training young people to be well adapted towards existing employment opportunities. It should develop their creativity and initiative, as our societies also have need for individuals who are capable of innovation and of constructing the economic, social and political life. A preparation for the exercise of democracy implies a solid knowledge of economics and politics as well as a training for a democratic life within the school.

It is also necessary that industry and social and political institutions assist young people to fully participate in their affairs.

Reforms in education will not solve the difficulties of transition from school to work. It is also necessary that society, through fundamental structural reform, is ready to receive the young people.

IV. RECURRENT EDUCATION

Post-school education in all OECD countries tends to re-enforce inequality as the provision of vocational training and higher education favours those who succeed academically at school. Millions of adults could live a more satisfying life and contribute more to the needs of society if educational opportunities were to be genuinely available to them. TUAC therefore calls for a fundamental shift in post-school educational priorities in favour of those who have left school at the minimum age, with few or inadequate academic qualifications.

The need is for a total public system of general education, from basic education to higher education, which must also make provision for vocational needs. Access to vocational courses should be open to the individual, as of right, and not controlled by employers. Recurrent education will also have to aim at general and humanistic education instead of being only geared towards vocational training.

The first requirement of OECD countries should be to implement ILO Convention N° 140 on Paid Educational Leave. Governments should also ensure that financial obstacles to lower income groups undertaking full- and part-time studies are removed.

The education authorities in each country should be expected to ensure that the range of courses provided are relevant to adult experience and interests. In addition, courses must be organised in a form that takes account of adult responsibilities, i.e. courses of shorter duration, part-time courses, and opportunities for transfer of credits between educational institutions.

The authorities responsible for determining entrance requirements for specific courses—particularly the institutions of higher education—will also need to take account of other kinds of experience than previous educational qualifications.

Part Two

EDUCATIONAL POLICY TRENDS

Analytical Report by the Secretariat

INTRODUCTION

The development of the education system over the next few years is fraught with increasing uncertainty. The economic context and demographic situation which obtained during the period of rapid expansion have changed radically and their future development is not easy to predict. A number of variables, particularly financial resources and employment opportunities, which until recently helped to stimulate the demand for education, are now subject to constraints that may affect demand trends or trigger off fluctuations of varying amplitude. These uncertainties are compounded by the new political climate that prevails in many countries as to the functions, content and outcomes of education and its role in modern society. In the analysis and forward planning of education technical considerations are becoming increasingly dependent on the orientation of policy choices and options.

Any analysis of such a complex social organisation as the educational system and of the way in which it functions has to take into account that its development is influenced by a number of stresses and pressures exerted by its environment and by society as a whole, itself in a state of constant evolution. Part of this pressure is due to demographic trends which subject the system to quantitative change (numbers of pupils, teachers and buildings) and also to qualitative change, since mass education calls for new educational structures, teaching methods and content. Other pressures working on the periphery of the education system require it in particular to respond to the personal needs of individuals and provide specific professional qualifications. These two often appear as conflicting stresses, reflecting two types of objective (the satisfaction of individual demand or of economic needs) and represent the two extremes between which education policies and criteria for resource allocation fluctuate.

In recent years the play between these various pressures has undergone considerable change. The lower birth rate and its possible cyclical trend, the difficulty of integrating young people into the labour market and the measures adopted to remedy this situation, the declining demand for certain types and branches of education and the growth in the demand for adult education—all occurring against an unfavourable economic and resource availability background—are some of the main factors that lie behind this change: they point to the need for closer study of the recent evolution of major trends affecting education and their likely impact on future developments.

The present report is an attempt to provide the basis for such an analysis. It deals with the following main topics:

- demographic trends and their future effects on education;
- enrolment trends and factors likely to affect demand at each level of education;
- trends in teacher supply and demand;
- trends in educational expenditure;
- interrelationships between education and employment.

Each of these parts examines past trends and, to the extent possible, likely future developments. The data used to describe past developments are mainly statistical and cannot therefore give a full picture of such an overall, complex process. Moreover, an analysis of quantitative data is inadequate for predicting future numbers because of the uncertainty of supply and demand factors, increasingly affected by political, sociological, economic and psychological considerations. Compulsory education is chiefly affected by the demographic factor and by decisions that may alter its length or pedagogical organisation. Other levels of education, however, are influenced by a broader range of factors. These determine individual demand and the supply of places needed to meet it as well as to satisfy other needs of the economy and of society. In addition, account must be taken of various types of constraints which will operate, particularly financial ones.

Given the uncertainties inherent in any discussion of the future development of education and the unreliability of forecasts, the emphasis in this report is on the qualitative aspects of development factors rather than on any attempt to provide precise figures, beyond general orders of magnitude as these emerge from national or Secretariat estimates or assumptions.

I

EDUCATIONAL TRENDS AND THE SOCIO-ECONOMIC CONTEXT: OVERVIEW

The expansion of the educational sector has been one of the most significant developments in social policy in the OECD over the last twenty years. Between 1960 and 1975, student enrolment rose by 35 per cent. Educational expenditures rose by 15.1 per cent per year (in current terms), that is 1.4 times more rapidly than the GDP, and the number of teachers increased by 30 per cent. This expansion was the result of a number of factors: demographic trends (the school age population 5-24 years rose by 18 per cent): rising private incomes; and flexible government budgets, increased by returns to steadily growing economies generating skilled employment opportunities and a belief that educational upgrading was necessary to nourish that growth.

There now appears to be a break, or at least a serious strain, in these previous expansionist trends. Fertility has slowed down significantly in recent years and whether it ultimately levels off or revives, there will be a necessity for adjustments in the educational sector in the foreseeable future. This will certainly require at least a redeployment of resources in response to the changing composition of the demand for education.

The current state of the educational sector, and the set of problems facing administrators, planners and policymakers, have largely been shaped by the expansionist conditions of the 1960s. Current goals and objectives were defined during this period; the stock of educational resources—staff, buildings, and equipment—was largely accumulated then, and the structure of the system was determined in response to strong but diverse social demands for a more highly educated society. Aspirations of students were raised by growing demands for technicians, managers and professionals stemming from continued tight labour markets during the 1960s. But the 1970s so far have failed to generate sufficient continued demand to satisfy the expectations of those days.

More recently, this situation has been dramatically aggravated by the growing number of educated young people looking for a first job. Large increases in the youth labour supply coupled with growing slack in the demand for labour has meant substantial increases in youth unemployment in the OECD countries[1]. This, in turn, has put further pressure on the educational system to adjust to rapidly changing extraneous conditions.

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[1] See "Diagnosis" in *Youth Unemployment*, Vol. I. *A Report on the High Level Conference, 15-16 December 1977*, OECD, Paris, 1978.

RECENT TRENDS

In 1975 the formal educational systems of the Member countries accounted for a total of 180 million full-time students, or nearly one-quarter of the population in the area as a whole. The teaching profession accounted, on average, for 2.8 per cent of the active population in 1975 and the sector as a whole absorbed nearly 5 per cent of the area's Gross Domestic Product. Between 1960 and 1975 enrolment in primary, secondary and higher education rose from 122 million to 164 million, an average increase of 2 per cent per year (Tables 1 and 3).

This somewhat global picture masks some significant fluctuations by level of study (Table 3) and age groups (Table 4) and large differences across Member countries (Tables 6 and 8). Enrolment in primary schools, for example, rose only modestly in the last 15 years, while in secondary schools it increased by nearly fifty per cent and in higher educational facilities it more than doubled. Compared with total student enrolment, the share of primary schools fell from 58 per cent to 46 per cent, while the shares of secondary schools and universities increased from 37 per cent to 44 per cent and from 5 to 10 per cent respectively. Such an evolution naturally creates pressures for an internal redistribution of resources.

Within the age group 5-14 years, already high enrolment rates did not increase significantly by 1975, except in some Mediterranean countries (Table 7). Within the age groups 15-19 and 20-24 years, rates of enrolment increased each year between 1960 and 1975 on an average of 2.6 per cent and 4.7 per cent respectively (Table 4). Since 1970, growth rates of enrolment for these upper age groups slowed considerably except for Australia, the Netherlands, and Portugal. For some countries where rates of school attendance have been traditionally high (Canada, Sweden and the United States), school enrolment rates for those between 17 and 24 have actually fallen since 1970 (Table 9).

THE SOCIAL AND ECONOMIC CONTEXT

It is useful to recall the general context in which the trends noted above took place. Presumably, policy decisions to expand the educational system can largely be seen as a response to perceived demands by individuals and society at large. Individual decisions to consume education depend in complex fashion on a variety of interrelated variables: psychological (school performance, motivation); institutional and structural factors (standards of achievement, admission criteria); family and peer groups pressure; the state of the economy and particularly of labour markets; and resultant financial constraints (family incomes and the availability of financial assistance). During the 1960s, of course, such factors as these combined with population trends to increase the demand for education significantly and, in consequence, the supply as well. It is no accident that the rapid expansion of the system took place during a period of sharply rising household income. Rising incomes permitted families to finance the costs necessary to allow an extension of school attendance (tuition charges and foregone earnings). Rapid economic growth also implied increases in available public funds and by extension in expenditures on education (Table 10). It may be noted, without attempting to establish causal relationships, that in the early 1970s the falling rate of growth of incomes corresponds closely to the declining demand for post-compulsory education.

Economic growth has historically been associated with an expansion of the education system. Growth generates at one and the same time premia on school-related skills and the wherewithal to finance the acquisition of those skills. Table 11 indicates private returns to investments in education during the 1960s. However, growth is not the only explanation of trends in school enrolment, as seen from the fact that the demand for university education began to fall in a number of countries prior to the decline in aggregate demand. One explanation for this might be that, in the early part of the 1960s, there was an excess demand for highly educated labour and this generated economic advantages for those fortunate enough to have a university degree. As the number of graduates increased over the years, these economic advantages declined; as the growth process slowed, the decline accelerated.

Economic growth is associated with profound social change: social and geographic mobility increases with growth, patterns of communication become better articulated, and social inequality becomes less and less acceptable. The role of education is key to accommodating these sorts of changes. Explicitly or otherwise, in most Member countries education has been assigned the dual task of reducing the inequality of life chances and of responding to the needs of labour markets. Decline in growth prospects and the deterioration of labour markets have made the continued attainment of these objectives more and more difficult. Social and regional inequalities in educational opportunity have been narrowed over time, but the process has been painfully slow. Current constraints imply a likelihood that even past modest achievements may not be sustainable in the future.

Accompanying these significant shifts in supply and demand for education have been some fairly profound internal changes in the system. In most Member countries, the period of compulsory schooling has been prolonged by one or two years, the structure of the first level of secondary studies has been modified to offer greater choice and flexibility, higher level courses have been diversified, and shorter cycles have been introduced. Research and innovations relating to teaching/learning have increased at all levels of education, creating new opportunities in pre-school and adult education.

THE OUTLOOK

The social and economic context that prompted the rapid expansion of the educational sector during the 1960s has apparently been profoundly altered in recent years. Of the many important developments, those relating to demography, aggregate economic growth, and labour markets are the most relevant.

The fall in fertility index that began in most Member countries in the early 1960s has slowly but surely reverberated up the educational scale, causing, for the medium term, a decline in the rate of growth of enrolments and correspondingly in required staff and associated resources. These demographic developments coincided with the economic recession which significantly reduced employment opportunities for the young—school completers and early leavers alike. Weaknesses in the macroeconomic structure, in fact, have pointed to underlying weaknesses of a microeconomic sort and have raised fundamental questions about the relevance of education for the labour market. One of the continuing points of stress has to do with the growing incompatibility between increasing professional aspirations due to increases in the general level of education, and the actual distribution of job offers during a period of slow growth. The persistence of inflation has caused a generally restrictive budgetary policy and this has been matched, in the private sector, by a decline in the rate of growth of real household income. Such factors combine to constrain the amount of resources available to the educational system.

It is impossible to chart the likely longer-term course of these factors or to indicate what kinds of compensatory adjustments may be taken by the education sector itself. Whether fertility will revive or will stabilise at current low levels is an open question. Youth unemployment will not likely decline dramatically in the foreseeable future and the longer the problem continues, the more likely its effects will extend to the more highly educated. This helps to narrow returns to education, thereby further depressing demand for schooling. On the other hand, discouragement about job availability prompts young people to remain in school rather than enter the uncertain labour market. Finally, as the ageing baby boom of the 1950s is replaced by the dearth of the 1960s, relative employment prospects for youth should improve (somewhere around 1985, depending on the country).

It is particularly hazardous to speculate on the budgetary outlook and likely future expenditures on education. Such factors depend on preferences, pressures and the give and take of the political system in adjudicating competing claims. These are matters of policy choice, not analysis. From the present vantage point, however, it would appear that pressures to contain inflation will tend to constrain public budgets and this should imply a slowing down of educational expenditures.

Had these changes (in pattern of fertility and economic growth) been gradual, their accommodation would have been a relatively easy matter. But they were abrupt—first an abnormal boom, then an abnormal decline. The educational systems within OECD countries have proved rather robust, able to function even in the face of rather severe constraints. How they will accommodate future change is the question. In particular, there is no evidence of a decline in the demand for the kind of attributes provided by education. There is, however, a significant likelihood that future growth prospects will be substantially below those recorded by the OECD in the 1960s. This will require a number of structural adjustments, including encouragement to redeploy labour and capital in accordance with their most productive potential. This redeployment can be most efficiently achieved if accompanied by research and development efforts, technological innovations, improvements in communication and the diffusion of technical knowledge. In other words, adjustment to current structural changes creates a demand for technology and information. The only point of contention is what will be the role of the formal education sector in providing for that demand.

Then too, there is a number of stated educational objectives which have not yet been achieved. This is particularly the case for pre-school and for adult education. Changing labour market situations may require increases in vocational education and training. Finally, much remains to be done regarding the equalisation of educational opportunities for the disadvantaged and for special problem groups (racial minorities, the handicapped, persons in rural areas, etc.).

The likely evolution of demand for education raises a number of policy questions relating to resource allocation in a period of extreme uncertainty. These questions reflect and influence supply decisions taken by the educational sector itself, and have implications for the structure of the system regarding formal and informal components, traditional versus non-traditional, technical versus general education, training in schools relative to training in the enterprise sector and, in certain countries, the appropriate relationship between the public and private sectors.

II

DEMOGRAPHIC TRENDS AND THEIR EFFECT ON EDUCATION

The study of population trends and their effects on the education system is an important prerequisite in forward planning. In the past this approach was often limited to an exercise in population projections which then served as a basis for predicting future enrolments. Such exercises are becoming increasingly unreliable because of the uncertainty and instability of fertility patterns, and greater attention is now being paid to investigating various hypotheses concerning the evolution of demographic trends. Moreover, the lower fertility rate in most Member countries during the last ten to fifteen years and especially since 1972 affects the structure and movements (natural and migratory) of total and sub-populations; this will have effects on educational development and policy over and above mere enrolment numbers, as well as on the labour force and on the social services[1].

A population—both total numbers and the given structure—is continually modified by births, deaths and migration. In the case of the school population the birth-rate is by far the most important factor. While it has no effect during the very first years, the factor increases in significance over time. In 1980 only a fraction of pre-school education will be affected. By 1990 almost all of primary school and ten years later, in 2000, all levels of education will be concerned.

FERTILITY TRENDS

During the 1960s and particularly since 1972 the demographic trend in Member countries has been marked by a sharply falling birth-rate[2]. The annual number of births dropped by an average of 1.4 per cent during the last ten years, but this fall was as much as 5.4 per cent in certain countries. In a few others (Ireland, Japan, Spain, Australia, Sweden), no fall occurred or the number of births varied very little (Table 12).

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[1] For an analysis of all these effects in one country, the United Kingdom, see *Population and the Social Services* by the Central Policy Review Staff, HMSO, London, 1977.

[2] *Demographic Trends, 1950-1990*, OECD, Paris, forthcoming.

This trend is due to an almost general reduction in fertility. Fertility may be measured by means of a total fertility index[3]. During the 1950s this index tended to rise (except in Japan and Yugoslavia). Since 1960 (United States, Canada, Australia and New Zealand) and 1964-65 (Europe) the index showed a very sharp general fall which gathered pace from 1972 after levelling off around 1970-72 (Table 13). In 1975, two-thirds of Member countries had a fertility index lower than 210, i.e. at the threshold of generation replacement[4]. Several countries (Germany, United Kingdom, Sweden) have recorded the lowest indices ever in their entire peacetime history[5]. No single satisfactory explanation covering general fertility trends has as yet been put forward. Certain explanatory factors that are plausible in one country prove inapplicable to another. This lack of knowledge is all the more perplexing as patterns are often very similar from one country to the next[6].

Future fertility trends are to a large extent unpredictable. The most recent figures indicate that the current decline seems to be slowing down or even levelling off in certain countries (Germany, France, United Kingdom), but it is premature to speak of any reversal of trends at this stage. Most of the demographic projections obtained by the Secretariat[6] consider the most plausible assumption to be the continuation of low fertility levels. However, certain countries (France, United Kingdom, Sweden) envisage a change in trend and an upturn in fertility (Table 14)[7].

Our lack of knowledge concerning the main factors influencing fertility, coupled with unforeseeable variations in the index, mean that demographic forecasts rapidly become obsolete for the youngest age groups, that is, precisely those which concern us. For this reason several countries correct their projections each year, and from one correction to another conspicuous differences often appear within a few years. As an example, in Table 15 the latest projections available to the Secretariat are compared with earlier projections for the 0-14 age groups in 1970 and 1980. In both cases 1970 is the observed year, and the fairly slight discrepancies are solely due to different bases of calculation. If this was the only reason one would expect in 1980 differences of the same order as those in 1970. For several countries it will be seen that this is far from being the case; fertility assumptions have in fact been revised downwards from one projection to the next. Hence the population forecasts cannot be assumed as necessarily accurate or reliable. A number of these figures have moreover been made

[3] This total fertility index is equal to the weighted sum of fertility rates by age groups observed during a given year. Expressed as a percentage, the index shows, for any given year, the total number of children born per 100 females. It is not calculated for each successive cohort, but for women of reproductive age during a given year.

[4] As the proportion of male births is fairly constant (105 boys to 100 girls), if no child mortality were experienced each woman would have to average 2.05 children (an index of 205) during her reproductive existence merely to replace the generation. Under present mortality conditions in Member countries the probability of survival for mothers at average child-bearing age is around 0.97-0.98. Generation replacement is therefore ensured today when the index approximately equals 205: 0.975 = 210 births per 100 women. J. Bourgeois-Pichat, "Baisse de la fécondité et descendance finale", *Population*, November/December 1976.

[5] G. Calot and J. Hecht, "Long-term population policies", Council of Europe, SEM/PS(76)6, page 8.

[6] *Demographic Trends, 1950-1990*, op. cit.

[7] In these countries, certain demographers consider that an index lower than the generation replacement threshold cannot continue for long. They postulate from their observation of the trend observed over the last 30 years that fertility might in future evolve cyclically around the replacement threshold, i.e. 210. The instability of this index would be attributable to socio-cultural behaviour and to short-term economic factors. This irregularity generates disturbances and diseconomies in the health, educational and employment fields.

obsolete by later national studies. The fact remains, however, that the general trends appear to be valid and that, while the intensity, duration and date of the processes involved cannot exactly be determined, the general directions of demographic evolution over the next ten or fifteen years can at least be predicted.

DIRECT EFFECTS ON EDUCATION

The first and most obvious effect of the declining birth-rate is the ultimate reduction in the size of the school-age population. Between 1970 and 1990 the growth index for the 5-14 age group is expected to be lower than the growth index for the previous 20 years (except in Japan, Ireland and Portugal). It is negative in 15 Member countries (Table 16). The index, calculated by five-year periods, shows that the trend is not uniform: between 1970 and 1975 the fall was insignificant and occurred in only five countries; between 1975 and 1980 it affects three-quarters of the countries and is as much as 20 per cent (Germany). The rate of decline is expected to slow down at the end of the '80s (Table 17).

This downward trend is supported by national forecasts of enrolments in the 5-14 age group up to 1980[8]. Between 1975 and 1980 this age group is expected to diminish by an average of 3 per cent and by more than 10 per cent in certain cases (Austria, Canada, Germany, United States, Luxembourg). This fall should continue until the mid-'80s (Table 18). After that date, the effects of a more stable or increased birth-rate should be felt in this age group. Up to 1980, numbers in the 15-19 and 20-24 age groups are expected to continue to increase in all countries, but at a slower rate than before 1975. Not until the 1980s will the drop in the birth-rate affect numbers in these age groups.

This development will, particularly in the years of compulsory education, directly affect educational conditions and raise new management problems for the educational system. At the national level, assuming pupil teacher ratios, classroom size and unit costs to be constant, staff and building needs, together with total budgetary requirements, should decrease and a surplus of teachers and accommodation should occur. A lower renewal rate of teaching staff should imply an increase in the average age of teachers and there are likely to be changes in the distribution of total expenditures on education. However, this global calculation masks some important considerations which must be borne in mind for an appreciation of the true picture:

i) It does not allow for geographical movements of population or certain phenomena relating to urbanisation. Any large-scale regional migration will imply a concomitant shift in the demand for teachers, and particularly for school premises. There are no forecasts of these internal migratory movements; it seems that the draining of rural resources and efforts to revive sparsely populated districts (accompanied by the maintenance, regrouping and improved quality of public services) should tend to reduce the rate of outflow from rural areas[9]. A predicted smaller investment in residential construction might further help this trend. In recent years, small and medium-sized towns rather than large cities have benefited from the shift out of agriculture. The process of urbanisation tends to modify educational requirements according to area: older neighbourhoods tend to be inhabited by the lower-income groups who may require more expensive supportive education.

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[8] OECD educational data file.

[9] In France, for example, if the rate of rural out-migration observed in 1973-1975 (70,000 people each year) were to continue, there would be no more young farmers in 1985. Available forecasts indicate that their number will fall to 40,000 or even 20,000 by that date. See *Economie et Statistiques*, INSEE, Paris, 1976.

ii) In a situation of declining enrolments, it cannot be assumed that the ratios of pupils per teacher and per class will remain constant; in fact, there will doubtless be pressures, particularly from teachers and parents, to take advantage of this situation to improve the quality of education. Furthermore, a falling birth-rate does not affect all levels of education at the same time. Enrolments in primary schools may drop while those in secondary schools increase, and after a few years the respective movements may be reversed. These different, even opposite, rates of growth create difficulties for the training and retraining of teachers and for establishing criteria for teacher recruitment policies. The imbalances which result between education cycles are such that appropriate measures for the redeployment and the reallocation of teachers and buildings will need to be envisaged.

OTHER EFFECTS ON EDUCATION

This demographic situation has other more indirect or qualitative but no less important effects on the development of education and on educational policies. Particularly important are the effects on labour markets and competing social demands (health, social subsidies, pensions, housing, etc.). Lower fertility rates entail a general ageing of the total population and more importantly of the working population. Between 1970 and 1990 the proportion of young people is expected to decline everywhere (except in France), while that of older people should rise (except in Austria, Belgium, France and Turkey); the 15-64 age group will increase slightly in most countries. It should be noted that the increase in the 65-and-over age group is due mainly to the increasing number of people aged 75 and over. The effect of this ageing of the population is that young people in 1990 will be living in a world with a far different human environment from that of the past two decades (Table 19), and there will be a rapid growth of expenditures on health and other social requirements.

The annual renewal of the working population becomes slower the larger the drop in fertility. Existing relationships between labour force entry and withdrawal should change. These flows depend on participation rates, but also on variations in age group numbers. In the Member countries of the OECD, between 1960 and 1975 the number in the 15-24 age group rose by 30 million, and this increase in youth labour supply is an important factor contributing to current unemployment. But from 1975 to 1990 the increase is expected to be only 0.4 million[10]. Rates of entry into the working population should fall substantially (assuming participation rates remain constant) and be lower than departure rates. A German survey[11] shows that if current fertility rates are maintained, the number of entries into working life per 100 retirements would be as follows:

[10] *Demographic Trends, 1950-1990*, op. cit.

[11] H. Wander, "Demographic aspects of the active population", Council of Europe, Document SEM/PS(76)2.

1970-1975 : 108
1975-1980 : 122
1980-1985 : 132
1985-1990 : 98
1990-1995 : 75
1995-2000 : 67

Ageing will affect the working population, and this might reduce occupational and geographical mobility. Career promotion prospects might also be reduced as top posts are crowded by older workers. Small-sized and more rapidly created families should increase the tendency of married women to stay in or return to the labour force.

Another point of uncertainty concerns the effects of an ageing population on technical progress, productivity and hence employment. In some cases, tighter demographic constraints might activate technological progress, the scarcity of young people being an inducement to improve training and to resort to labour saving technology.

Finally, the declining birth-rate of nationals in immigration Member countries tends to increase the social significance of the educational problems of the foreign migrants. The future trend of migration is difficult to predict since it depends crucially on policy decisions. The present tendency is towards a slow-down of migratory flows as a result of the deteriorated employment situation in receiving countries. In some of these, the stabilization of the number of foreign workers is being accompanied by measures for integrating their families, and by an increase in the number of children and adolescents. In 1976, 22.6%(Germany) and 25.2% (France) of the foreign population were under 15 years old. In Switzerland 30% of foreigners are under 16, in Sweden 34.3% are under 17. These proportions have increased during the last few years[12]. Foreign populations generally have much higher fertility levels than nationals; furthermore, owing to the age structure of this population, mortality rates are much lower. In Germany, for example, the national population decreased by 624,000 from 1973 to 1975, whereas the foreign population increased by 279,000[13]. Such situations have given rise to social problems, especially as the foreign population is generally concentrated in a few, often underprivileged, areas. The educational problems raised by the presence of this population, and in particular by the "second generation" of migrants, will probably become even graver in the future. Areas likely to require attention are facilities and guidance for children, language instruction, the occupational and social integration of immigrant adolescents, adult literacy, and vocational or other types of training given with a view to the integration of these migrants. These measures will require additional resources, and in particular specialist staff. Moreover, the countries of origin will have to make arrangements for the return of their emigrants. In terms of education, action will be needed to ensure that children can go back to school and workers be retrained for employment.

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[12] SOPEMI, Continuous Reporting System on Migration, 1977 Report, OECD, p. 25.

[13] SOPEMI, 1976 Report, OECD, p. 7.

III

EDUCATIONAL ENROLMENT TRENDS AND SUPPLY AND DEMAND FACTORS

The trend of enrolments and their distribution within the educational system are basic data required for policy decisions about resource allocation. In fact, enrolment data are often interpreted simultaneously as a measure of the volume of supply (or the system's intake capacity) and— beyond compulsory schooling— as a measure of demand (resulting from all choices made by individuals and families and influenced by many psychological and social factors). The educational system tends to regulate pupil flows in accordance with its own dynamics, the objectives pursued by policy-makers, and available resources. The system may encourage, modify or discourage demands resulting from individual decisions to undertake or drop out of a particular type of study. Complex interactions take place between supply and demand factors: it may be assumed on one level that supply constrains demand in the sense that if there are too few resources demand will remain unsatisfied; but, at the same time, the pressure of demand may be sufficiently strong to affect the possibilities of further increases in supply and ultimately the trend of enrolments. The impact of these factors may vary depending on level being studied, and what happens on one level may later influence developments on others.

The present chapter discusses general enrolment trends and their underlying supply and demand determinants, without any effort to produce exact forecasts which, in a period of demographic fluctuations and demand changes, are likely to be even more unreliable than usual. Recent and likely future developments appear to be very different according to level of study. The diversity of the factors influencing supply and demand at each level suggests that they should be examined separately, though without losing sight of their interdependence.

PRE-SCHOOL EDUCATION[1]

In spite of the progress achieved at this level of education over the last few years, numbers have increased less rapidly than in the 1960s as a result of the decline in the birth-rate. Nevertheless, a general increase in enrolment rates can be observed (Table 20). This increase has not however redressed the marked imbalances between countries. In some (Belgium, France, the Netherlands) enrolment rates beyond the age of 2 are above 80 per cent. In most countries, the rates are very much lower, despite a rapid increase since 1970. In Sweden, for example, the proportion of children aged from 3 to 6 years attending pre-school full-time rose from 5 to 11 per cent between 1970 and 1975 (and from 30 per cent to 48 per cent for the 5 and 6 year-olds, including part-time attenders).

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[1] Problems in this area are being studied in detail by the Centre for Educational Research and Innovation in its Early Chilhood Education project.

Several factors and needs have helped to stimulate this demand for pre-school care and education:

i) research findings about the decisive influence of the first years of life on a child's learning (80 per cent of which is now thought to occur before the age of 6) and their widespread dissemination have encouraged the creation of stimulating environments, group-life situations, reciprocal contacts and interactions— with increased involvement of medical and educational staff;

ii) the desire to compensate for educational shortcomings, attributed to unfavourable family conditions, by pre-school education has been widely accepted as one way to improve subsequent school performance and to equalise educational and social opportunities;

iii) changes in the structure and conditions of family life tend to alter the capacity of the family to care for and bring up their children and to transfer these functions to the community; the reduction in the size of families and in the number of children, urbanisation, the generation gap, and distance between home and workplace are affecting all industrialised countries; other demographic processes are also emerging, such as the increase in the number of one-parent families[2];

iv) the increase in female employment is another component of this trend together with the wider issues of women's social role, equal rights and opportunities. The rise in the employment rates for married women creates a demand for child-care and pre-school services, and changes the traditional child-minding role of the mother. In certain cases, where the absence of child-care facilities kept female participation in employment at a low level, such services were established for the very purpose of attracting women into the work force[3];

v) finally, a distinct change (though it is encountering resistance in some countries) in basic social values relating to the respective roles and responsibilities of the family and society with regard to the education and care of young children has helped to stimulate both supply and demand.

It is partly because the need for training, care and socialisation takes so many forms that there is such a variety of centrally and locally administered health, education and welfare institutions and that enrolment ratios vary so widely from one contry to another. Countries with very high pre-school enrolment ratios apparently give preference to training and equality of opportunity objectives. In other countries, the paramount role of the family and a reluctance to entrust young children to institutions explain why enrolment ratios are low.

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[2] In the United States for example, the proportion of one-parent families with one or more children aged less than 10 years has risen from 7 per cent in 1948 to 15 per cent in 1974, as a result of the increase in divorce and illegitimate births. In more than 90 per cent of these cases the head of the family is the mother. See U. Bronfenbrenner, "Reality and Research in the Ecology of Human Development", *Proceedings of the American Philosophical Society*, 1975, p. 43.

[3] As an example, a survey of 500 families in Sweden in 1972 showed that when a full-time childcare centre was opened, out of 100 women who had been working at home 69 per cent found a job within a fortnight, 5 per cent were looking for one and 22 per cent had become students.

Prospects for the development of pre-school education will largely depend on the policies which individual Member countries adopt—especially those on budgetary decisions. In addition to the effect of budgetary constraints these policies will essentially be dictated by the pressure of demand on the one hand, and by value judgements as to the roles of family, community and State on the other. Demographic and other external factors are likely to have only a limited effect, except in the few countries with very high enrolment rates where, in the short term, increasing demand will cease to compensate for demographic decline and numbers will consequently diminish. However the level of pre-schooling will depend on population trends. In the United Kingdom, for example, in 1986, 50 per cent of the 3-5 age group will be in nursery schools according to the most likely " central demographic projection— but it will be the case for 90 per cent of this age group in the very low fertility projection "[4].

In other cases, demand and enrolments should continue to grow. The factors referred to above, which have promoted a growing need for care and education facilities for young children over the last ten years, will continue to exert their effects.

Family patterns, and the social role of women, will manifestly continue to evolve. The importance of pre-schooling for the child's intellectual development, self-fulfilment and socialisation seems unlikely to be challenged. The trend of female employment is much less predictable but the propensity for women to hold a job will not change unless fertility rates increase. Some doubts have been expressed about the capacity of pre-schooling to equalise opportunities later in life[5] but these arguments are not expected to curb demand. Furthermore, in many countries the provision of facilities remains markedly uneven, to the detriment of rural areas with scattered populations; pressure of demand and the determination of the authorities to equalise opportunities of access should make improvements possible in the medium term. Whether such schooling should be extended to all children remains controversial. It appears to be accepted on a non-compulsory basis for children aged 5 and 6 years, particularly in countries where primary education begins at 7 years of age. Sweden[6] has taken the lead in this trend and legislative and financial measures adopted in 1975 require local education authorities to establish enough places to offer every child at least one year of pre-school education, and to inform families about their rights and the facilities available.

The advantages of pre-schooling before a child is five, and the right of the authorities to intervene with regard to his care at home are not unanimously recognised. Secretariat studies into child care show that parents would like full-time or part-time care and education services to be freely available for all young children. Analysis of current trends seems to suggest that in all industrial countries, the growing demand for services will within the next few years move governments to provide or take responsibility for a nursery service which will be available for all children from the age of three whose parents choose to avail themselves of it.

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[4] *Population and the Social Services*, op. cit. p. 20.

[5] These effects depend on how compulsory education operates. Heavy pre-school attendance does not rule out a high degree of wastage, varying greatly according to social background, during primary education. In Belgium for example (see Table 21 and Sources) in the first year of primary school 25 per cent of the children of unskilled workers have already fallen behind, compared with barely 5 per cent of children of managerial staff. Such backwardness intensifies throughout the course of primary education. Yet the wastage can be reduced. A cohort study in France in 1973 showed that the influence of pre-primary schooling on scholastic achievement was still apparent up to the first year of secondary education; it was found that the chances of reaching this stage without repeating in Section I (the most prestigious) of a lower secondary school

i) increased by 50 per cent for a worker's child with pre-school experience (as against a child from the same background, but with no pre-school experience) and by 11 per cent for a " manager's " child;

ii) were 2.4 times higher for the latter than for a worker's child when both had received pre-schoo education, compared with 3.3 times higher when neither had attended pre-school (see " Pane d'élèves ", *Etudes et Documents* No. 28, Ministère de l'Education, France).

[6] P.B. Rosengsen, *Pre-school in Sweden*, The Swedish Institute, 1973.

COMPULSORY EDUCATION

Depending on the country concerned, this level covers comprehensive basic schooling or a combination of primary schooling and the first cycle of more or less diversified secondary education. Its quantitative development is most easy to predict because of the decisive influence of the demographic factor, which is discussed in Chapter II of this report.

During the first half of this decade (Table 5) numbers tended to stabilise, with a decline in primary enrolments compensating for an increase in the first cycle of secondary schooling, owing to falling birth-rates in almost all European Member countries after 1965. When this drop first appeared since 1960 the decline in numbers was already marked (in the United States, for example, it amounted to 5 per cent) between 1971 and 1975. It is expected to continue between now and 1980 and to affect two-thirds of Member countries. It will be particularly noticeable in Austria, Canada and Germany (Table 18). In a few countries (Denmark, Japan, Portugal, Sweden and Turkey) enrolments will continue to grow.

Steps taken to modify the duration or age limits for compulsory education may mitigate the effects of this trend in some cases. A lower entry age is being discussed in many countries. In France, the recent reform makes it possible to enter this level of education at age five. Dutch authorities are preparing to integrate the second preschool cycle (children between 4 and 6 years) with the primary schools. In the Scandinavian countries, the idea of lowering the age of entry into primary school from 7 to 6 is under discussion. In Sweden, it has become possible to start primary school at six, depending on the results of a reading test.

The possibility of extending the duration of compulsory schooling is under consideration in such countries as Belgium, Italy and Turkey, where it ends at 14 years. In Greece and Portugal an extension from 6 to 9 years is now being put into effect. The prolongation of compulsory education beyond the age of 16, long advocated by certain groups in several countries, does not appear to be now under serious consideration.

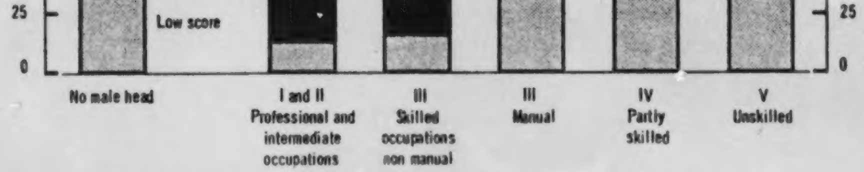
In the medium and long term the policy issues regarding the compulsory educational levels are less quantitative than qualitative and structural. The operation and quality of this educational sector as well as the results achieved are at the centre of the present debate concerning the efficacy of basic schooling: the development of compulsory schooling during the next few years will be profoundly marked by the search for solutions with a view to improving quality. The main problems can be summarised as follows:

i) Failure and poor school results are a persistent phenomenon. They are reflected, according to the case, in high repeater and drop-out rates, poor results in tests and end-of-school examinations, maladjustment to subsequent studies or inadequate basic knowledge on entering working life. There is still a heated debate as to whether this represents a decline in educational standards or not. In the United States, for example, the Wirtz

Commission has demonstrated that there has been a steady decline since 1963 in "Scholastic Aptitude Test" results: the average score in the verbal expression tests has fallen by 49 points and the score in the mathematics test by 32 points (the perfect score being assessed at 800 points). But the use of these tests and whether they truly measure educational achievement are matters of dispute. Failure is very unevenly distributed according to social background. In Belgium for example, the proportion of repeaters among children of senior managers as opposed to those of unskilled workers, are respectively 5 per cent and 25 per cent in the first year of primary education, and 10.9 per cent and 43 per cent in the sixth year (Table 21). In other systems such gaps also appear in test results. For example, as the following chart shows, in the United Kingdom the results of reading comprehension tests for 11-year-olds are almost the exact opposite depending on whether the head of the family belongs to the professional or the unskilled groups. The varying influence, according to social background, exerted by school results on subsequent study can be illustrated by data from a recent survey in Sweden. The marks obtained at various stages of primary school, and information gathered about lines of study selected according to pupil background, are given in Table 22(a). From the sixth year of schooling, average marks (on a scale from 1 to 5) obtained in the main subjects by the sons of unskilled workers were more than 1 point lower than those obtained by boys whose fathers were university graduates. These discrepancies were less marked in the case of girls.

READING COMPREHENSION SCORE AT AGE 11
BY SOCIAL CLASS OF PARENTS

1969
Great Britain



Note : Figures for this chart are taken from the National Child Development Study. Social class is defined for male heads of household only.

Source : *Social Trends No. 4*, Central Statistical Office, London, 1973.

ii) The extension of compulsory schooling and the reform of first-cycle secondary education designed to provide an extended common educational experience and equal opportunities to everybody have not completely achieved their aim, and the comprehensive school itself often remains apparently somewhat selective in nature. The inequalities continue throughout education, depending on what directions are taken or choices made in the course of the last years and upon leaving compulsory education. In the Swedish survey mentioned above (Table 22(*b*)) 50 per cent of the sons of graduates who had obtained marks below 3 in the sixth year had enrolled for the ninth year in the section preparing for the Gymnasium, as against 5 per cent for the sons of unskilled workers. These percentages are 76 and 21 for boys in the two social categories having obtained an average mark between 3 and 3.5 in the sixth year of school. The children of unskilled workers with an average of 3.5 to 4 have almost the same chance of entering the section preparing for the Gymnasium as those of graduate fathers with an average below 3.

Table 23 gives the same kind of information for the Netherlands. It shows that under 50 per cent of the sons of unskilled workers whose school results are sufficient to enable them to continue with secondary studies effectively do so, whereas the sons of senior managers pursue such studies in far greater numbers than their school results would suggest. The differences are still more noticeable in the case of young girls.

Statistics on the social background of pupils in the first cycle of secondary education for a number of countries (Germany, Belgium, France, Italy, Sweden) show that the choice between general or long courses of study and technical or short courses is very largely determined by background and by school results, themselves correlated with social background.

iii) A fairly large minority of youngster leave school as soon as their compulsory schooling is over with neither viable qualifications nor specific occupational training and frequently with a bias against school and further education. They then have great difficulty in finding jobs and are the most likely to be unemployed (see Chapter VI). Since leaving certificates at the end of compulsory schooling are no longer passports to even many of the more humble jobs, the conditions for entering working life have been still further aggravated for these young people by the employment crisis.

There are many causes behind these various problems. Over the course of time they have tended to be attributed in succession to the pupils' psychological character and abilities, then to the effects of the socio-cultural environment and finally to the "situations" created by the school. The latter is said to pay insufficient attention to the child's psychological and social problems and to the relationships between intelligence and affectivity, and between school culture and family culture. Schools tend to favour intellectual learning and to impose too inflexible academic curricula. Inadequate diagnosis of the child's difficulties, as well as ill-adapted teachers' attitudes, roles and training, are also mentioned. Finally, the conflict between the function of this level of education in preparing for subsequent studies and the more terminal one of preparation for working life underlines the inherent strain in the system and its selective character even at this stage[7].

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[7] The problems of policies for basic education are being considered in the framework of the Programme of Work of the OECD Education Committee.

SECOND CYCLE SECONDARY EDUCATION

This level of non-compulsory study generally corresponds to the last three years of secondary school attended by pupils in the 15-18 or 16-19 years age groups. It is organised along varying models, depending on whether the internal differentiations are pedagogical (" tracking" in American high schools, for example) or structural, with courses leading to higher education and others of a vocational nature[8].

In recent years, enrolments have consistently risen (except in Denmark, Finland and Sweden), but to a less marked extent than during the 1960s (except, however, in Germany, Spain and the Netherlands) (see Table 5). Enrolment rates in the 15-19 age group have appreciably advanced (from 5 to 10 percentage points) since 1970 in most countries, except in Canada and the United States where for the first time since the war the rates have declined, and in Sweden, where it became stable (Table 8). A decrease in the enrolment rates for the 17 year age group (United States) and the 18 and 19 years age groups (Sweden) can be observed for both sexes (Table 9). In three-quarters of the OECD countries, from 40 to 65 per cent of the 15-19 age group attended school in 1975. This overall trend conceals changes in demand choices and in the internal distribution of enrolments. At this level of study a double distinction can be made:

i) between studies leading to higher education and terminal studies (and independently of the general or technical oriented characteristics of these studies). This distinction, however, is not always very rigid owing to changes during the last few years in the possibilities of access to certain higher studies offered to some categories of technical education graduates. Since 1970 pupil enrolments in the preparatory classes for higher studies have increased more rapidly in Austria, Denmark, the Netherlands, Portugal, Spain and Yugoslavia. The distribution has remained constant in other cases (France, Germany, Italy, Turkey) or leans more to the "terminal" side (Norway, Greece) (Table 24);

ii) between general and technical studies. Many countries have recorded a much faster rise in technical education enrolments since 1970 (Table 25), contrary to the trend often recorded during the sixties. This situation is most evident in Austria, France, Italy, Norway, Sweden and the United Kingdom, but is far from general.

As attendance at this level of education is voluntary, its growth is difficult to predict. National forecasts or Secretariat estimates indicate that enrolments will have to rise by 10 to 30 per cent during the period 1975-80. The increase is expected to be particularly sharp in Portugal and Spain; it should be negligible in the case of Canada, the United States and Japan, which already have a very high level of enrolments; in some cases (Austria, Germany, Turkey) the increase is essentially due to an increase in the 15-19 age group. By 1980, an average 56 per cent of this age group should be in full-time schooling in the OECD area, as against 50 per cent in 1975, but with very wide differences between countries (13 per cent in Turkey, 81 per cent in Japan). The assumption of a continuing increase in enrolments at this level of study is supported by a whole range of considerations relating both to supply and demand factors, but a major uncertainty is whether school attendance might be affected or not by job market situations.

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8. *Beyond Compulsory Schooling. Options and Changes in Upper Secondary Education*. OECD. Paris. 1976.

a) *Demand factors: individual decisions*

It is difficult to identify general trends as decisions to continue post-compulsory study are known to be closely determined by the individual's performance at school, itself influenced by the pupil's socio-economic environment (parents' occupation, income and level of education) and by the chances of success which each group estimates subjectively according to its social or geographical situation. The choice of branch of study and survival rates are moreover influenced by occupational motivations and by school results which are also associated with the pupil's social background and by sex. Investigations in several countries show that these different variables can be combined to provide an adequate instrument with which to forecast pupil orientation: good pupils from privileged social categories opt for studies leading to the more prestigious occupations, where the risks of academic failure and the subsequent financial returns are high; good pupils from underprivileged groups, for whom the lack of earnings entailed by continuing to study is an important factor in their decision, tend to avoid the risk associated with the choice of long and general study courses. Table 26 shows the effects of each of these variables and associated choices.

While the choice to undertake some particular line of study remains subject to institutional constraints, and despite a gradual tendency for disparities to lessen, such choices are still by and large determined by the pupil's social background and sex.

The most recent surveys regarding the composition of the school population in the second cycle of secondary education confirm the continued operation of this process in the selection of branches, sections or disciplines[9]. In Belgium for example, almost all the children of senior managers, but less than half the children of workers, continue their general education at that level (Table 27). Similarly, in France (Table 28) pupils from the " professional and senior management" category (6 per cent of the active population) accounted for 14.6 per cent of those in the first year of the second long cycle, but 60 per cent of those in the most prestigious mathematics sections (C) and 1.2 per cent of those in the first year of short technical education, as against 27, 26 and 45 per cent respectively for the children of workers (37.7 per cent of the active population). A not very different situation can be observed in Germany, Sweden and Italy (Tables 29 to 31). In the United Kingdom, a sample survey carried out in 1975 showed that 60 per cent of 16 year-old children with fathers in non-manual occupations wanted to stay on in full-time education, and that was twice the rate of pupils whose fathers were in manual occupations.

The chances of access to courses leading to post-secondary education vary widely from region to region, a situation that appears to have persisted over the last 15 years (Table 32). These variations reflect not only different social structures, but also disparities in available facilities and in regional labour market situations (on which the number of vacancies in technical and vocational courses partly depend), as well as different socio-cultural lifestyles.

Lastly, the persistence of social prejudice regarding the distribution of roles according to sex leads to very different choices at this level of study although gaps between male and female ratios have been gradually narrowing (Table 33).

The youth employment situation can be expected, over the medium term, to influence the propensity to go on with secondary education or the type of study to be chosen. It is a particularly unfavourable situation for those who have no occupational qualification, those who left school at the end of the compulsory period or broke off their secondary education, or have a diploma in general education. Unemployment rates for these people are above the averages for the 18 to 24 age group which, in turn, are very much higher than overall unemployment rates (Table 34). Many employers feel that these young people possess neither the aptitudes nor the qualifications needed for a stable job; the very limited job opportunities open to them seem likely to encourage postponement of their departure from the school system, as has been noted in the United Kingdom since 1975, after a phase of deceleration in the demand for post-compulsory education[10]. This tendency, strongly encouraged by the authorities in a number of countries, can be expected to help maintain a heavy demand for education and vocational training at this level, both full-time and part-time, pending a substantial improvement in employment prospects for the young.

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[9] See in particular T. Husén, *Social Influences on Educational Attainment*, OECD/CERI, Paris, 1975 and *Individual Demand for Education*, Vol. II, *Case Studies* (forthcoming).

b) Supply factors: policy decisions

Measures concerning selection, orientation or admission enable the education system to modify individual decisions to engage in any particular type of study. The effect of such institutional action is hard to assess; the results arising from the operation of the school system cannot be dissociated from those of specific policy decisions. These decisions depend upon a number of factors including, in particular, the youth employment situation, the volume of individual demand (not only for education at this level but especially for higher education) and on the budgetary and staff resources available or to be allocated (this latter point will be mentioned in Chapters IV and V).

The high risk of unemployment now confronting young people entering the workforce may be regarded by policy-makers either as an essentially cyclical problem, or as a structural problem with long-term social and individual consequences. In the first case, the decisions taken would seem to aim more at increasing the scope of accelerated vocational training or delaying departures from the educational system. In the second case, the tendency is to modify the structure and content of education and working life, and to stimulate job creation. Most governments confronted with this situation would appear to be attempting to pursue both strategies at once. Short-term training measures were given priority because of the urgency and gravity of the youth employment problem in spite of doubts as to how effective such measures actually were. Increasingly, structural reforms are being introduced or are planned both for the educational system and in the employment sector, the common aim of all such measures being to improve the education and vocational training of young people, as well as the conditions for the transition from school to work and vice-versa. These new possibilities should in the medium term stimulate the demand for, and the further development of, this level of studies, particularly in the technical and vocational training branches, and thus the tendency observed during recent years should continue. This is not the place to review the very wide range of cyclical and structural measures adopted or envisaged in this field[11]. The changes introduced are essentially directed at two objectives:

i) to improve and increase vocational training opportunities at secondary school level[12]. In several countries existing intake capacity has been increased; the number of places (measured against enrolments) has risen since 1970; in other cases, the establishment of a comprehensive second-cyle secondary school integrating general and technical education seems under present conditions to have encouraged pupils to turn more to the technical side. In Sweden, for example, between 1972 and 1975 the proportion of pupils enrolled in the two-year vocational courses rose from 40 to 61.6 per cent;

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[10] *Individual Demand for Education*, Vol. II. *Case Studies:* "United Kingdom", OECD, (forthcoming). Not much is known about the effects of poorer employment or earning prospects on the demand for education. It can be assumed that they are not uniform, but vary according to the type of study or qualification, sector or branch of employment and social status. The theory might be advanced that opposite effects succeed one another: at first the worsening labour market may discourage demand; during a second stage persistent unemployment may tend to delay departures and increase the retentiveness of the education system, an effect further promoted by a number of training policy measures.

[11] See *Youth Unemployment, Vol. II, Inventory of measures concerning the employment and unemployment of young people*, OECD, Paris, 1978.

ii) to improve and diversify counselling and training facilities with a view to easing the transition from school to working life. These opportunities are usually offered on a voluntary basis; in some cases (Germany, the Netherlands) they are compulsory up to 18 years and offered on a part-time basis. Apprenticeship[13] is one of the most significant measures in this category. While in some countries its future remains very uncertain, in others it is still the main form of vocational training for young people (Germany, Austria, Switzerland), or exists side by side with on-the-job training (United Kingdom, Ireland) or training in technical schools (France, United States). In recent years many countries have improved this form of training by changing its structure, reducing its length, regrouping qualifications and strengthening the general education component of it, while the public authorities have in various ways persuaded firms to increase the number of places available for trainees; in several cases, an increase has been observed in the number of apprentices after a period of reduction or stabilisation. Other measures are directed at increasing alternation possibilities between work and training experience, at facilitating part-time work and in-service training (Australia, Canada, New Zealand, the United States), at building up vocational guidance facilities (Norway, Japan, Finland) or at increasing the number of employment induction courses[14].

POST-SECONDARY EDUCATION

The marked expansion observed at this level during the '60s slowed down considerably after 1970 in most Member countries: the average annual enrolment growth rate, which was 8.6 per cent between 1960 and 1970, was no more than 3.4 per cent after that date. In many cases the growth rates between 1970 and 1975 were less than half those recorded before 1970; in Sweden, a large drop (11 per cent) was observed, while enrolments levelled off in several countries at least up to 1974 (Tables 5 and 6).

The flow of new students dropped after 1969 (in Sweden and the United Kingdom), 1971 (in the United States and Netherlands) or 1972 (in Belgium, France and Italy). This trend cannot be attributed to demographic causes, since the numbers in the age groups concerned, which declined between 1965 and 1969, were almost

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[12] "Trends and Policy Issues", *Vocational Education and Training*, OECD, forthcoming.

[13] For a full picture of the present situation of apprenticeships see *Policies for Apprenticeship*. OECD, Paris, 1979.

[14] *Youth Unemployment, Vol. II*, op. cit.; see also *Education and Working Life*, OECD, Paris, 1977.

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stable between 1970 and 1975. In the European countries concerned it was the slowdown in growth rates of qualified secondary-school leavers, and especially the lower transfer rate to university, that accounted for this trend (Table 35).

Not all types and branches of study, or groups of students, were uniformly affected; the slowdown was therefore accompanied by modifications in the choices of the student population and in its composition.

i) During the 1960s short-cycle higher education developed much more rapidly than university cycles in non-European Member countries, whereas the opposite occurred in European Member countries. In the latter the trend has, however, been reversed, inasmuch as university enrolments have levelled off while the non-university sector has continued to advance (Table 36).

ii) This trend reflects a very distinct increase in the numbers of students choosing technical and vocational branches of study. Within the universities, the distribution of enrolments among branches of study (available for 11 countries) confirms this trend; the movement observed during the 1960s, broadly marked by a relative lack of enthusiasm for science and technology, medicine and law in favour of the arts and social sciences, has been reversed (particularly as regards medicine) or has at least slowed down since 1970[15].

iii) Enrolments in part-time studies in those countries where these exist (Australia, Canada, United States, New Zealand, Yugoslavia, Ireland and United Kingdom) have increased much more rapidly, except in Ireland and the United Kingdom. This corroborates the trend towards greater diversification of studies and of the student population.

iv) Data on the development of the ***age structure*** of the student population between 1965 and 1970-74 show (except in Germany) that some ageing has occurred (see Table 37). This appears to be mainly due to the increase in the duration of studies. In a few countries these trends could reflect the broader higher-education opportunities available to adults.

v) Similarly, the surveys on the social background of university students show that the gaps between extreme social categories (" higher and lower" or " professional/managerial and workers") have declined during the last decade (Tables 38 to 41). Because of the lack of recent data it is impossible to catch the effect of the slowing down of the expansion on the social origin of students.

This trend appears to have unevenly affected the various types and branches of study, in which marked differences persist in the social composition of the students; the comparatively greater opportunities of access to higher education for students from lower-income groups have mainly occurred in those types and branches of study in which they were least poorly represented. Thus in the United States the distribution of students among two- and four-year colleges by educational level of the head of family has changed little, if trends in the level of instruction of the population are taken into account. In France, sons of manual workers (40 per cent of the 17-21 age group) are largely excluded from the Grandes Ecoles (for example they account for 2.5 per cent of students in the Ecole des Hautes Etudes Commerciales), but account for 22.8 per cent of enrolments in IUTs[16]. In universities the proportion rose from 11.1 to 12.6 between 1967 and 1974, but this increase was mainly in arts, law and economics. With regard to students from the "professional and managerial" category (5.2 per cent of the 17-21 age group), whose representation has slightly decreased between those two years, the increase in their numbers was particularly noticeable in medicine (40 to 47 per cent of the total enrolment) (Table 39). In Sweden, the comparative development in the social composition of students in open and restricted faculties was similar. Between 1962 and 1972 the increase in the proportion of new male students from working-class backgrounds (from 17.6 to 25.2 per cent) occurred mainly in the arts and social sciences in the "open" philosophy faculties. (This trend was less marked for female students).

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[15] *Recent Student Flows in Higher Education*, a report by the Institute of Education of the European Cultural Foundation, Paris, 1976. A survey among institutions in the United States shows that between 1968 and 1974 enrolments increased in the technical sections of two-year colleges (81 per cent of these reported increases), the medical sciences (80 per cent), business studies (73 per cent), biological sciences (58 per cent), etc. Reductions were in language studies (63 per cent) engineering (36 per cent) education (36 per cent), arts (26 per cent), etc. See Glenny et al., *From Edifice Complex to University Without Walls*. A Report for the Carnegie Council on Policy Studies in Higher Education, 1976.

vi) The differences between enrolment rates by sex have continued to decline gradually in most countries; the sustained growth of the number of female students has in some cases prevented a general decline in enrolments; this was the case in Canada and in the United States where, between 1972 and 1974, the transfer rate from secondary education declined for boys while remaining constant for girls. Although the participation rates by sex are almost identical in some countries (Finland, France, Sweden), the proportion of females still remains lower than 40 per cent in half the countries. Furthermore, the breakdowns by branch of study have changed little and testify to the persistence of course differentiation according to sex, particularly as between technical and literary subjects.

vii) Lastly, according to the few studies available[17], regional disparities closely associated with differences in the supply of places appear to have diminished as the higher education network has become denser and the effects of distance less significant. The slower rate of expansion does not appear to have affected all regions to the same extent; in the United States, for example, it is the rural areas and small towns— and in a more general way the central regions— that have been most affected by the drop in enrolments[18].

This sharp, unexpected slowdown in the development of higher education, together with the changes in the choices and composition of student populations, reflect recent changes in supply and demand factors. These need to be examined as a basis for making future assumptions.

a) Demand factors

The effects of most factors influencing individual decisions at secondary level are felt at post-secondary level. The relative importance of each factor, however, may well be different, and economic and financial factors (which are not independent of social origin and past or expected school achievement) probably exert a greater influence at this level.

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[16] University Institutes of Technology.

pean Cultural Foundations, Paris, 1976. A survey among institutions in the United States shows that between 1968 and 1974 enbrolment increased in the technical sections of two-year colleges (81 per cent of

[17] "Regional Effects of Swedish Educational Planning" and "University and its Environment: The Finnish Experience", *Education and Regional Development*, Vol. II, *Technical Reports*, OECD, forthcoming.

[18] Glenny et al, op. cit. pp. 11-12.

Secretariat studies[19] confirm the process by which individual demand is segmented according to type of study and three characteristics— level of ability, social background and sex. Table 42 summarises this process. Little is known about how the pattern has been changing over recent years. In the United States it is seen that between 1962 and 1972, the reduction in demand mainly affected " traditional " students with high ability from high-income groups, whereas the proportion of females with high ability from underprivileged backgrounds and of males with low aptitudes from privileged backgrounds have distinctly increased[20].

The general tendency has been to try to account for the decrease in demand and the lower transfer rates from secondary education by changes in:

i) the attitudes of certain social groups towards education and employment opportunies;
ii) the rates of return;
iii) the structure of studies;
iv) standards and psychological attitudes with regard to school, work and life[21].

But the evidence in support of these assumptions is scarce and precarious.

The evolution of the economic situation and of the employment of graduates has apparently been reflected in some countries in a decline in the rate of return from education (Table 43). According to assumptions based on the human capital theory, this decline would account for the slowdown in demand. This premise is corroborated by survey findings showing that student motivations are chiefly vocational and that what they look forward to is high social status and high salary. In the United Kingdom, for example[22], the theory has been tested that fifth form secondary pupils and 18-year-olds, perceiving the financial advantages of jobs requiring degrees, would enrol in higher education. Conversely, those not perceiving such salary differences would start work sooner. The findings show a positive relation between this perception and the choices made. They are not however entirely convincing, since a high percentage of pupils make choices that are not compatible with their conception of salary differences. Other factors (cost of studying, including earnings foregone, financial assistance, conditions of admission, chances of success, social environment, etc.) cut across anticipated financial benefit and limit the significance of the decline in rates of return.

The poor graduate employment situation provides a further (but also precarious) explanation for the reduction in demand. In countries (such as Sweden) where student flows grew very rapidly during the 1960s the difficulty of their absorption by the labour market may have had a deterrent effect on demand. These maladjustments resulted first in reduced opportunities of access to high-level jobs (Table 44) then in the appearance of graduate unemployment. The effect on demand probably varies at each of these phases: while demand may decline during the first phase, persistent unemployment appears to be an incentive to postpone the end of studies, unless institutional or financial considerations interfere. In the United States the lower demand and transfer rates from high schools have been largely attributed to the ending of the Vietnam war and of conscription, higher costs and, to a lesser extent, fewer job openings[23].

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[19] *Individual Demand for Education*, Vol. I and II, op. cit.

[20] *The Condition of Education*, The National Center for Educational Statistics, Washington, 1976.

[21] *Individual Demand for Education, Vol. II: Case Studies* "United Kingdom", op. cit.

[22] Ibid.

The financial capacity of students and their families is a consideration the importance of which varies with the costs to the student (direct costs, maintenance, and earnings foregone), and is commensurate with family income, as can be seen from enrolment rates in the United States[24]:

Income	1970		1976	
	Males %	Females %	Males %	Females %
Under 5,000 dollars	20.7	20.8	18.9	26.4
Over 15,000 dollars	63.7	59.3	54.5	63.1

Several European countries in which educational costs charged directly to the student are very low have found that the less favourable employment outlook and severer selection have been accompanied by a relative decline in the standard of living and purchasing power of students. Why this has not caused a reduction in demand, but at most a slowing down, has been analysed with the use of an eligibility model[25].

These considerations suggest a number of inevitably precarious assumptions[26] about the possible future trend in demand. It is highly unlikely that overall demand will decline or even level off in the future, as might be suggested by assuming a strict causal relationship between the demand trend and employment opportunities (and rates of educational return). A whole set of factors suggest that demand would continue to rise, although at a slower pace than during the 1960s. Some of these factors are economic in character: the capacity and flexibility of the economic system to use such manpower resources (particularly in the tertiary sector), individual decisions to continue studying to compensate for the declining economic value of a degree or to reduce the risks of unemployment (which are higher for non-graduates), or again, to await a more favourable economic climate or better employment opportunities, etc.). Some are of a social nature: extension of the socio-cultural role of education, new time-use patterns, access by the individual to quality of life, etc. Changes noted in the composition of the student population can be expected to continue and to constitute an essential determinant of future trends. The gradual replacement of students of the traditional kind (highly motivated, of high ability and from affluent backgrounds, choosing traditional lines of study, etc.) by " new types" (older, less able, from very mixed social backgrounds, preferring career-oriented courses, etc.) is tending to create new demands which the institutions will have to meet[27] and which will considerably affect structures, teaching methods and management.

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[23] M.S. Gordon, ***Higher Educaton and the Labor Market***, Carnegie Commission on Higher Education, 1974, p. 5. The opportunity for students to interrupt and diversify their studies (step in, step out) is the most recent cause advanced. According to a survey carried out in February 1974, 31.3 % of university students, 36.5 % of other 4-year institution students and 63.8 % of students enrolled in 2-year institutions have interrupted their studies. ***The Condition of Education*** op. cit. 1978. p. 132.

[24] ***The Condition of Education***, 1978, op. cit., p. 116.

[25] L. Lévy-Garboua, "Students' Behaviour under Mass Education: The Eligibility Model": Communication to the Third International Conference on Higher Education at Lancaster, and "Les demandes de l'étudiant ou les contradictions de l'université de masse", ***Revue Française de Sociologie***, N° 17, 1976. This argument accounts for student behaviour in adapting to the labour market imbalance brought about by mass higher education. It distinguishes demand for education as such (elite market) from demand for the quality of life associated with student status (and the great amount of time spent in study and recreation), reflecting a dissociation between the present and the future. The decision to continue studies would depend on a discretionary judgement of present and future income, and of immediate access to quality of life and future access to the elite. If the student seeks the greatest possible satisfaction, having regard to budget and time constraints (which economists regard as rational behaviour), in a context of declining future advantages from education, a new balance will be achieved by reducing the time-cost of study or by adjusting actual study time by various means. The loss of future advantages or well-being will be compensated for by taking greater immediate advantage of student status. This behavioural adaptation has important consequences for the aims and operation of the university analysed by the author.

[26] In the United States, where about ten projections are available, considerable variations are found, depending on whether the outlook for higher education is viewed very pessimistically or optimistically.

b) Supply factors: policy decisions

Attention has already been drawn to the fact that future numbers will depend on the interrelationships between demand and supply. The concern to reduce the growth of unit costs and the introduction of new admission policies make supply a decisive factor, particularly in view of the trend towards increased control over the development of higher education by limiting free access to certain branches of study or introducing stricter management methods.

A few general considerations concerning the nature of policy decisions in this field may be advanced:

i) it is doubtful whether resources are allocated to this sector with economic efficiency as the main criterion;

ii) the responsible authorities are particularly sensitive to the external economic and non-economic effects of education;

iii) the pursuit of the objective of equality of opportunity, implying that social demand should, at least globally, be satisfied as far as possible, is unlikely to be challenged;

iv) policy choices have to take into account the needs arising from an anticipated economic recovery.

The employment situation has led, as at secondary level, to a proliferation of highly diversified and more or less specialised educational and training provisions. Furthermore, the authorities responsible for national higher education policy and/or for the institutions are currently re-examining admission requirements: restrictive measures are proposed in certain traditional branches of education (these are opposed by the students), but the recruitment base tends to be broadened to the advantage of new categories of young people and especially adults.

The combination of all these factors creates a very complex situation. Final policy decisions will also be the outcome of political bargaining between the social partners. Yet it seems unlikely that the overall level of supply will be out of line with the anticipated demand trend discussed above. Furthermore, the inertia of the educational system seems to rule out any marked discrepancy between supply and demand. Policy decisions can be expected to affect the distribution of flows within the system (to the advantage of non-university and vocational studies), student choices, the quality of service provided and the response to new needs, rather than the overall demand level. Changes in the distribution of decision-making powers brought about by decentralisation, or government intervention at the expense of academic communities, tend to enhance the influence of the political factor (and of supply) on future development, thus adding to the uncertainty of forecasts and projections.

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[27] The American universities seem to be particularly aware of this trend, as can be seen from the findings of an investigation into this question, in Glenny et al, op. cit. (see also Table 45).

Country and Secretariat projections forecast an average rise of about 3.3 per cent between 1975 and 1980 in enrolments for the 20-24 age group, i.e. the same as that observed between 1970 and 1975. In several Mediterranean countries (Portugal, Spain, Italy), as well as in the United Kingdom, Austria and Ireland, the increase in enrolments should be quite high (over 6 per cent); in many other cases (France, Germany, Japan, Sweden, Switzerland, Yugoslavia) the number of students should level off. On average, by 1980, 14 per cent of young people aged 20 to 24, i.e. 2 per cent more than in 1975, are expected to be enrolled in full-time higher education[28]. Beyond 1985, the population decline would lead to a decrease in enrolments.

GENERAL AND VOCATIONAL ADULT EDUCATION

Highly diverse opportunities for adult education exist within and among Member countries. In some they are integrated with, or form sub-sectors of, post-compulsory education; in other cases they have developed outside the formal system linked to firms, the mass media and cultural activities; in some countries the various forms co-exist[29].

Educational statistical series in this area are both too incomplete and too recent to provide any information about the composition and development of the populations concerned. The very different ways in which they can participate (full- or part-time courses, seminars, trainee periods, lectures, etc.) make it difficult to calculate the numbers involved.

The proportion of the adult population involved in some form of training varies from one country to another; around 1971 it ranged from about 8 per cent to a maximum of 35 per cent (Sweden); 12.5 per cent in the Netherlands and the United States, for example; 15 per cent in the United Kingdom, 20 per cent in Germany, 23 per cent in Canada. And enrolments have been increasing rapidly over the last few years. Thus in the United States they rose from 13 to 17 million between 1969 and 1974 (10.9 and 13.3 per cent of the total adult population), or an increase of 30.8 per cent. In Sweden participants in study circles increased from 1 to 1.6 million between 1962 and 1968. In the United Kingdom participation in local education authority adult courses grew from 0.9 to 1.4 million between 1960 and 1970; in France the number of trainees taking advantage of the 1971 training act increased from 1.3 to 2 million between 1972 and 1975, etc. It is to be noted that these major advances have occurred within a fairly short time, following the availability of wider opportunities and facilities. To a far greater extent than at other study levels supply tends to create its own demand.

Participation in adult education is known to be very unevenly distributed according to social background, age and geographical area. The majority of the adults involved belong to higher and middle-income groups, are aged between 20 and 35 and live in urban areas. The inital level of instruction is the major variable: the tendency to enrol in adult education, especially in vocational training, increases with the level of instruction and skill. Individuals whose level of instruction is below elementary are

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28. OECD educational data file.
29. *Learning Opportunities for Adults*. Vol. I, *General Report*, OECD, Paris, 1977.

poorly represented, as shown by recent surveys in Canada, Germany, France and the United States among other countries.

Interesting as these observations may be, they provide only a very limited explanation of the problem of adult access to education. They reveal the differences and inequalities of participation as between groups, but they conceal very sharp variations within these supposedly homogeneous groups. Analyses of participation motives emphasize the importance of the link between the individual's situation and his participation in adult education. External obstacles (working hours, financial cost, family commitments, etc.) seem to be less decisive than psychological obstacles connected with the individual's degree of self-confidence, aspirations and attitude towards study, and the value attached to education by his peers. It is, in fact, generally held among researchers that participation is very much dependent on whether the individual sees any value in education, i.e. whether he expects through education to meet the demands made on him, thereby influencing his own situation.

The future development of adult education is difficult to predict. The existence of a high potential demand is little disputed. It is attributable to the rise in vocational qualification and retraining requirements linked with employment difficulties and unemployment, the population's higher level of basic education, the probable increase in available leisure time and, more broadly, the extension of the social functions of education[30]. The trend of expressed demand should depend mainly on extension of the opportunities offered, as well as action likely to stimulate adult participation. In this area, a whole series of observations leads to the assumption that adult education opportunities will continue to grow. The following may be particularly noted:

i) The adoption of legislation on educational leave or other measures relating to general or vocational education and training, as well as the extension of conditions for using these opportunities, are being discussed in several Member countries.

ii) Many countries are considering more flexible conditions of admission to the formal educational system and especially the post-secondary sector; this opening to adults is facilitated by a restructuring of study courses (bridging courses or modular systems) which make it possible to defer studies during adolescence and encourage adults to return to education later.

iii) Extension of the new "distance teaching" media (national and cable television, remote processing, etc.) could eliminate certain geographical or temporal obstacles.

iv) Additional financial aid should make it possible to implement the concept of a "deferred right to education" and encourage certain disadvantaged categories or those with a low level of education to use the possibilities offered.

Analysis of adult participation factors shows that such participation depends not only on supply conditions but also on action to influence adults' expectations and perception of education and training. Many countries are developing means of information and sensitisation or financial incentives designed to influence the individual directly or through the groups with which he identifies (trade unions, professional associations, local associations, families, etc.). Such action is particularly decisive in the case of disadvantaged groups, particularly those who may be classified as

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[30] The report on *The Condition of Education*, op.cit. states that in the United States "the adult population, whose participation in education has recently increased, is a growing potential source of students and that the greater number of adults, combined with a growing perception of education as a consumer good, should contribute to future growth in this sector".

"functionally illiterate" and whose number is much higher than one might expect, even in the more advanced countries. Other measures adopted outside the educational sector should help to overcome certain external obstacles to participation and stimulate the demand for adult education: changes in the organisation of work, in the length of working hours, in work content or work sharing and also in the forms of participation in the life of the firm, all of which provide incentives to adults to learn; the same applies to measures for improving the social opportunities offered to the individual throughout his working life.

The extension of these educational opportunities is linked with the development of adult and youth vocational training policies in a situation of high unemployment. Such policies can be viewed as means of:

i) regulating job supply by persuading adults to leave their jobs temporarily in order to improve their education or training;

ii) facilitating the adjustment between supply and demand with a view to reducing frictional unemployment[31] through retraining and further training activities;

iii) enhancing the human resource potential, or at least preventing it from deteriorating through unemployment, thus ensuring a proper return on basic education expenditure. Investment in human capital is a means of increasing competitiveness; financing the training of workers is preferable to financing their prolonged and involuntary inactivity. In a period of unemployment, education and training could provide opportunities for the extension and renewal of qualifications so as to contribute to improved levels of well-being as well as to the quality of labour supply when the economic situation improves.

For all these reasons it is reasonable to assume a continuing rise in the number of workers undergoing training or education. The OECD medium-term strategy for employment and manpower policies[32], which makes vocational training one of the important means for overcoming temporary employment disequilibria, tends to support this assumption. The strategy argues that training should supplement and strengthen job creation measures on behalf of certain categories of workers, especially young people. It should also help to correct certain mismatches between supply and demand and reduce frictional unemployment. Such training is not just narrowly vocational; insofar as these mismatches often occur between the secondary and tertiary sectors, retraining the unemployed and preventive measures to encourage "general" as distinct from "job-specific" vocational training should be encouraged.

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31. Frictional unemployment is that which arises due to normal lags between leaving one job and securing another.

32. *A Medium-Term Strategy for Employment and Manpower Policies*, OECD, Paris, 1978.

IV

TRENDS IN STAFF RESOURCES

Around 1970, teachers (full-time) accounted on average for 2.5 per cent of the labour force in the OECD countries; proportions ranged from less than 2 per cent in some of the Mediterranean Member countries to over 3.5 per cent in Australia, Belgium and Canada. During the 1960s numbers of full-time teachers increased by 30 per cent (in one-third of Member countries), while the total working population in the OECD countries grew by 11 per cent. Fluctuations in teacher supply and demand over the last ten years are fairly difficult to analyse because of incomplete statistical data. A survey by the Secretariat[1] shows that from 1965 to 1970 most Member countries registered:

i) clear improvement in overall pupil/teacher ratios and the elimination of teacher shortages in primary education; a more or less balanced position was achieved around 1970, with a ratio under 25 for the United States and Italy, between 25 and 30 in Canada, France, Japan and the United Kingdom and above 30 in southern European Member countries;

ii) gradual improvement in pupil/teacher ratios in general secondary education and a stabilisation of these ratios in technical education;

iii) an accentuation in the proportion of women teachers beginning in the 1950s and an amelioration in qualification rates, i.e. a higher percentage of qualified teachers, which was fairly marked in primary schools, but less so in secondary schools.

Little is still known about trends as from the early 1970s. In a recent survey of 18 Member countries the Secretariat obtained information on " the present situation and future trends in teacher supply and demand at primary and secondary levels, possible imbalances, and policy measures adopted or planned for regulating supply and demand"[2]. Despite considerable forecasting difficulties and statistical gaps (non-teaching staff is not taken into account), the following trends may be discerned:

i) Teacher demand will be affected by the fall in enrolments, first in primary then in secondary education, itself due to the lower birth-rate observed in most countries. The prospective rise in the birth-rate should alter the trend after 1975 and the effects be felt on enrolments a few years later. This irregular population growth and its repercussions at each level of the education system will disturb recruitment rates and the use of teacher training establishments.

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[1] *The Teacher and Educational Change: A New Role, Volume 2: Recent Trends in Teacher Recruitment*, OECD, Paris, 1974.

[2] For a more detailed analysis, see " Present Situation and Future Prospects of Teacher Supply and Demand in Member Countries ", *Teacher Policies in a New Context*, OECD, Paris, forthcoming.

ii) In some countries the present situation will help to improve pupil/teacher ratios and percentages of qualified teachers, as well as in-service training opportunities for teachers. In other countries (England and Wales, Italy, Sweden), owing to financial constraints imposed by the economic situation, the pupil/teacher ratios will remain the same. It does not seem, however, that the needs created by qualitative measures designed to improve the system can compensate for the lower demand created by fewer enrolments.

iii) Inadequate data exist on two aspects of teacher supply— departures and re-entries. Annual departure rates— now ranging between 4 per cent (Finland) and 11-12 per cent (Australia)— should decline in most countries in view of the age structure of the teaching profession, the fewer opportunities for employment outside the education system and the longer maintenance of teachers in service: in the United Kingdom, for example, the departure rate should fall from 9.5 per cent in 1972 to 5.3 per cent in 1985. On the other hand re-entries, which are expected to increase in several countries should, in theory, alone be able to meet the demand for teachers, provided the downward trend in departure rates continues and enrolment forecasts are borne out.

iv) Estimates of the number of new entrants vary according to whether they are trained in specialised institutions (usually the case for primary teachers) where the number of places may be fixed by the authorities, or are university-trained (with or without any professional training following the theoretical studies) where the supply depends solely on the student's choice of a particular line of study and on his knowledge of the openings to which it leads (the case for secondary teachers in many countries). According to national estimates the number of candidates for posts should increase (Germany, United States) while the capacity of training institutions should either decrease (United Kingdom, France/secondary education), remain the same (Australia, Denmark) or in some cases increase (Japan, France/primary education).

v) The above situation results in imbalances between teacher supply and demand. Although a number of Member countries still suffer from a general or sectoral shortage of teachers, most of them are now, or will more or less shortly be, faced with surpluses successively affecting the different levels of education. Side by side with overall surpluses, shortages will however continue to exist in certain regions and/or disciplines[3]. Such surpluses can already be seen (or should emerge within two or three years) at primary level in several countries (Germany, Belgium, Denmark, United Kingdom); they should go on increasing until the mid-1980s, when the same process would occur at secondary level. Around 1985 one out of every six teachers in Germany would thus be affected, while in the early 1980s in Australia the surplus would account for 15 per cent of the estimated demand in primary education and 25 per cent of that in secondary education. (Table 46).

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[3] "Present Situation and Future Prospects of Teacher Supply and Demand in Member Countries", op. cit.

vi) **This situation may make it necessary to envisage measures for regulating teacher supply and demand. Among the measures relating to demand may be mentioned those that consist in improving pupil/teacher ratios and in transferring teachers, after retraining, to those types of education (pre-primary, special, or adult education) that are expected to grow. The extension of in-service training for teachers, improved levels of qualification and the needs of teachers for service in developing countries could also help to increase teacher demand. Other measures relate to supply, such as reducing the capacity of training institutions, lowering the age of retirement or discouraging students from undertaking studies leading to the profession, either through clear information as to the lack of openings or by linking training less closely to recruitment. No precise adjustments would however seem possible or desirable, since shortages might then well recur. It would be preferable to re-organise the supply, by such means as teacher-training reforms in higher education, by promoting greater mobility between levels and types of education and disciplines, by providing a more comprehensive training, by increased emphasis on re-training and by eliminating the distinction between existing categories of teachers. Since the supply should respond to a variable demand, it is essential that a certain surplus should be accepted and be used to improve the quality of teaching.**

Short-, medium- and long-term measures recommended for this purpose are analysed in the recent Secretariat report, already cited[4].

These quantitative trends in supply and demand are accompanied by profound changes in teachers' tasks and roles, their working conditions, the use of their time and, lastly, in the content of their initial and continuing training— all of which are connected with the broader changes affecting the educational system. More particularly, they result from the adoption of more individualised or small-group learning methods, the institution of teaching teams, the introduction of forms of participation in the management of educational institutions and in the preparation of curricula. Teachers' tasks tend to be considerably diversified as a result of the increased number of options and the adoption of more flexible forms of assessment, the use of new equipment and educational technologies and, finally, the concern to adjust methods more appropriately to the needs of the different groups and individuals. This diversification leads to the development of continuing in-service training activities, and to the training, recruitment and use of new specialist staff for counselling, documentation, psychological or medico-social aid, as well as various kinds of teacher assistants. However, the responsibilities of such staff and their training and relations with the professional teacher corps have yet to be defined[5]. Although the need for this new type of staff is recognised, it is practically impossible to make any assumptions concerning the trend of recruitment and therefore the amount of expenditure which will be required.

It is just as difficult to estimate future developments in the social status of teachers and how this will compare with that of professions calling for similar qualifications. Present status and level of remuneration vary considerably in Member countries according to category, establishment status (fully established or auxiliaries), qualifications and level of the education system[6]. It may be assumed that several

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[4] Idem.

[5] "Analysis of Teacher Tasks in Selected Innovative Schools", *Teacher Policies in a New Context*, op. cit.

[6] P. Döbrich et al. *Teachers' Salaries in International Comparison*, Deutsches Institut für Internationale pädagogische Forschung, Frankfurt am Main. 1976.

Member countries will be considering measures directed at greater standardisation of the various categories in the teaching profession, raising and improving status and working conditions, particularly in view of the need to compensate for the adverse effects which declining numbers will have on the morale of the profession as a whole. Such developments would be reflected in modifications to relative pay levels and rates of increase as well as certain characteristics of the teaching body, e.g. a decline in the rate of the feminisation of the profession that in many countries was a marked feature of the past[7].

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[7] All these considerations refer to primary and secondary school staff. Teacher requirements at higher levels and in adult education are equally uncertain. At higher levels, it is generally expected that the demand for teachers will rise slowly because of the slow increase in enrolments and also because of the intention to stop the fall in student/teacher ratios. University research worker requirements depend on the financial resources to be allocated in the medium term to fundamental research. The change in population composition and especially the admission of a growing number of adults should tend to diversify teachers' tasks at this level of study and lead to the adoption of new teaching methods, perhaps involving a need for para-professional staff and recourse to new forms of teaching (distance teaching). The development of vocational training for young people and in-service training for adults in industry or in schools using various forms of alternating work/training experience should imply a need for instructors, but there are no data for assessing the extent of the demand.

V

TRENDS IN EDUCATIONAL EXPENDITURE

Over the last fifteen years educational expenditure— as in the case of enrolments and demand— was marked by rapid increase up to the period 1970-73 when it began to level off, initially due to a diminution in demand (in particular for capital expenditure) and later due to budgetary constraints.

TRENDS UP TO THE EARLY 1970s

Trends in public educational expenditure[1] have been the subject of a recent study by the Secretariat. The conclusions of that study can be summarised as follows[2]. (see Table 47).

i) Public expenditure on education at current prices rose a good deal more rapidly than GDP: the elasticity on average is 1.4 (varying between 1 and 2). It averages 1.16 by reference to expenditure and income per capita.

ii) Around 1972 notable differences can be observed between countries in the public education share of GDP. These varied between 2 to 2.5 per cent in several of the Southern European countries and 7 to 8 per cent in a number of Northern European countries and in Canada. To some extent these differences reflect the varying weight of the private sector.

iii) "Some international uniformity exists, however, at the primary and secondary level, where most enrolment ratios (students as a percentage of the relevant age group) reach 90 per cent levels and where costs per student cluster surprisingly closely around a figure of some 20 per cent of per capita GDP. But the diversity is much greater for higher education. Enrolment ratios go from lows of 12 to 15 per cent in Austria, Switzerland and the United Kingdom, to peaks of 45 per cent in North America. And costs per student vary from 40 to 120 per cent of per capita GDP.

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[1] Public educational expenditure represents a very high percentage of total educational expenditure. According to the national accounts (current expenditure) it amounted to some 80 to 85 per cent in the United States, Canada, Japan, Finland and Australia, and 95 to 99 per cent in Italy, Belgium, Norway, the Netherlands, United Kingdom and Sweden. Its accurate measurement calls for a complete, detailed inventory of all sources of finance and financial resources devoted to education, including the training of adults. This the Secretariat undertook to do on the basis of a standard classification of education systems and types of expenditure in three case studies on France, Japan and the United Kingdom. For this purpose some countries have established an educational economic accounting system showing funding and expenditure sectors and enabling total national expenditure on education to be evaluated. This is true for France, where national expenditure amounted to 5.8 per cent in 1971 and 6.3 per cent in 1974 of GDP, of which 50 per cent was financed by the Ministry of Education's budget, 68 per cent by the State budget, and 84 per cent by the public sector (the State, local and other authorities), 11.8 % by the households and 3.5 % by the private enterprises.

Source: Le Compte Economique de l'Education et des Formations SEIS., French Ministry of Education, Notes d'Information 76.01 and 78.16.

[2] *Public Expenditure on Education*, OECD, Paris, 1976.

iv) "Between the early 1960s and the early 1970s, the share of expenditure in GDP rose, on average, by about 1 percentage point, and did not fall in any Member country. The main features were:

- A relatively faster growth of prices in the educational sector which alone accounted for over 50 per cent of the increased share;
- A modest increase in expenditures on primary and secondary education reflecting both some increase in student numbers and a slight tendency for 'real inputs' per student to rise faster than per capita GDP;
- A spectacular increase in higher education common to practically all countries, which reflected a near doubling in the number of students but was also accompanied by a 20 per cent fall, relative to the growth of GDP per capita, in real inputs per student[3]."

v) On average capital expenditure represents approximately 20 per cent of total expenditure on education and 1 per cent of GDP for the countries studied. During the period considered, capital outlays as a proportion of total education expenditure seem to have either levelled off or declined slightly in primary and secondary education and to have risen in higher education. This pattern reflects rates of enrolment at each of these levels.

vi) In summary, the Secretariat's study concluded that:

- primary and secondary education represented the bulk of education expenditure in the OECD area, largely on account of the number of pupils it covers; higher education is imparted to a much smaller proportion of the area's population (less than 1.5 per cent), but costs per student are perceptibly higher;
- through time the largest increase, in percentage terms, came from higher education, whose share in total expenditure rose from less than 15 per cent to some 20 per cent of the total;
- costs per student, relative to GDP per capita, rose moderately in primary and secondary education and fell in higher education; " real" inputs, however, either remained stable or fell sharply;
- very broadly, of the 1 per cent increase in the share of GDP of education here subdivided, 10 per cent is due to rising capital inputs. The remainder can be attributed entirely to two factors whose weights are roughly equal— the increase in student numbers (especially at the higher level), and the rise in the relative price of education.

RECENT TRENDS

From 1970 onwards the growth of public educational expenditure in relation to GDP has slowed down, as shown in Table 48. This would seem to be due to a fairly sharp fall in the growth rate of capital expenditure. Current expenditures in primary

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[3] *Public Expenditure on Education*, op. cit., pp. 69-70.

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education and teacher training have tended to grow much more slowly. Moreover, particularly in the cases of the United States and of the United Kingdom, this trend has led to a very marked slowing down of unit costs (Table 51).

This trend towards a slowdown in the growth of public expenditure on education has been confirmed since 1975. It is inseparably linked with the fiscal policy choices imposed in order to reduce inflationary tensions. In 1976 and 1977 the effects of GDP have been about neutral or very limited[4]. The United States represents the one case where public expenditure was expected to rise during 1977, whereas in other countries current restrictive trends will tend to be more pronounced, particularly in the United Kingdom, where strongly restrictive measures introduced in 1976 will be maintained. In 1978, however, there was a discernable change in this trend: in Germany and Japan, for example, public expenditure actually increased and in the United Kingdom a less restricted policy was adopted. But in 1979 another slowdown is to be expected in most of the larger Member countries[5].

These budgetary considerations have had various effects on public expenditure on education. In spite of yearly fluctuations and changes in the internal distribution of funds according to the nature or level of studies, a certain stabilization of the share of educational expenditure, both in the public budget and in GDP can be observed in most Member countries since 1975. In Germany in 1975 and 1976, for example, an increase of this expenditure was slower than that of total public expenditure, but their share of the GDP is growing slightly. In the United Kingdom, the figure (at constant prices) has remained largely unchanged since 1974 and accounts for a smaller share of the national budget. In other countries (France, the Netherlands, Sweden) these expenditures continued to increase in 1976 and 1977, but at a rate not very different from that of the overall national figure.

Public expenditure, wether on the current or the capital accounts covers only between 50 and 80 per cent of the total sum spent on education, not excluding private expenditure, the cost of adult education, indirect costs and, in particular, foregone earnings. It is frequently very difficult to assess aggregate expenditures on education. The relevant data tend to be approximate and do not lend themselves easily to comparisons between countries. Thus, for 1970, in France, Japan and the United Kingdom, current public expenditure, including public subsidies to private institutions, accounted for 3.1 per cent, 2.9 per cent and 4.8 per cent of the gross national product respectively. If indirect costs were included (accommodation and foregone earnings), plus the cost of adult education, these proportions would rise to 7 per cent, 6,2 per cent and 7.7 per cent, that is, to almost twice the amount incurred by current expenditure alone. It is to be noted that according to these figures, expenditure on adult education amounted to 7 per cent in France, 14 per cent in Japan and almost 50 per cent in the United Kingdom of normal current expenditure on education[6].

During the seventies the total expenditure on vocational training rose rapidly, absorbing an increasing proportion of the gross national product, particularly in Austria, France, Germany, Italy, Sweden and the United Kingdom. Increased expenditure on training and retraining was initiated as part of manpower policies adopted early in the recession with a view to increasing job opportunities for the unemployed. These expenditures are made available either to public and private training institutions or to enterprises in proportions which vary greatly among the different countries. (As a general rule, they are lowest in countries where vocational training is provided at the enterprise level). Enterprises have been persuaded to " internalise" certain costs of the vocational training of their employees and to increase, in response to fiscal encouragement, the sums spent on training. In France, between 1972 and 1976, legislation designed to extend vocational training obliged firms employing more than 10 persons to divert 1 per cent of total salary expenditure for training purposes, thereby increasing the total expenditure on training from 2.8 billion francs to 6.2 billion, while the State contribution for the same period increased from 1.7 million to 3.1 million francs.

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[4] *OECD Economic Outlook*, December 1976 and 1977.

[5] *OECD Economic Outlook*, Paris, July 1978.

[6] *Educational Expenditure in France, Japan and the United Kingdom*, OECD, Paris, 1977. The U.K. figure accounts for more expenditure categories than do those for the other countries (e.g. correspondence courses, training in the armed services).

Developments in the functions of education and changing political priorities should tend to modify the internal distribution of existing or foreseen resources, along with methods of financing (although this matter is more controversial). During recent years, a number of transfers of funds have taken place within the education system:

i) from general education to vocational training;
ii) from the budgets of ministries of education to the budgets of employment services;
iii) finally, where the vocational training of actively employed or of unemployed personnel is concerned, the expenditure of business enterprises has been in part supplemented by public subsidies. This development reflects the importance attached to vocational training and to preparation for working life, the quality of which must be improved in periods of high unemployment.

In a number of countries it is thought that the existing distribution of resources within the education system works to the unfair advantage of certain social or racial groups. A more equitable distribution and a more equitable balance are being sought, notably for the benefit of underprivileged groups who fall victim to school failure and are at greater risk of being unemployed, and of adults with low educational attainments for whom it is important to give a second chance, as exemplified by the Norwegian law on adult education.

This redistribution of funds has led to re-thinking about student aid and grants. Several countries are planning to extend the kind of assistance enjoyed by post-secondary students to pupils in upper secondary education. Furthermore, if adults are to return to, and benefit from, the education system, they must be able to compensate for foregone earnings and to have better opportunities for educational leave.

A highly controversial question is whether education and training costs should be distributed differently among enterprises, individuals and the public sector (and within this last among the central, regional and local authorities). Modification of the rules governing the division of costs between taxpayers and consumers is envisaged differently by different countries, varying according to their systems of funding. By way of example, some of the factors raised in the debate are the following:

i) at the level of compulsory schooling, the principle of public funding is not questioned. The argument concerns the links between methods of funding and political objectives, together with the possibility of equalising resources. Efforts are being made, regardless of the centralized nature of funding, to equalise the level of services or their result rather than to equalise only the level of resources in schools and geographical zones by making extra funds available to groups with special educational needs[7];
ii) within the public sector, the tendency to decentralise decisions to local or regional levels and to encourage greater participation by parents and local communities is not necessarily accompanied by financial decentralisation,

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[7] *Educational Financing and Policy Goals for Primary Schools*, OECD/CERI in printing.

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but it implies the possibility of utilising community resources. Similarly, local financing does not necessarily favour private schools. State funding of the private sector does not have the effect of reducing differences between public and private schools and it poses the problem of freedom of choice for parents[8];

iii) at the higher education level, a number of surveys have shown an incompatibility between the derivation of funds from general taxation and the ill-balanced way in which use is made of the facilities as between social economic classes. But no country has yet taken action to alter the system;

iv) during recent years new mechanisms for financing vocational education have been elaborated with a view to encouraging enterprises to increase their training provision or, in certain cases, to introduce on-the-job training rather than resort to outside training institutions and thus to retain the work contract link unbroken. Since these initiatives have raised the cost of non-salaried personnel, it may be supposed that in the medium term governments will tend to transfer responsibility for a larger share of these costs to the community, either by taking direct charge of them or by ensuring employers of a degree of compensation through fiscal measures or subsidies.

PROSPECTIVE TRENDS IN PUBLIC EXPENDITURE

These trends can be plotted from the few national or international forecasts available. Such forecasts however are only meaningful by reference to the basic assumptions used, and on this account the data need to be supplemented by a discussion of the assumptions which lie behind the trends and the nature of policy decisions concerning such expenditure.

a) Available forecasts

Medium-term education expenditure projections are seldom drawn up. However, official forecasts are available for a few countries. The German projections[9] indicate that from 1970 to 1985 the share of educational expenditure of GNP could rise by some 0.5 per cent in real terms and 2.5 per cent at current prices (from 4.3 in 1970 to 4.7 or 6.8 per cent respectively in 1985, under the medium assumption for GNP growth). For the United Kingdom, the latest White Paper on Public Expenditure proposed cuts after 1976/77 which would cause an absolute decline in expenditure and could reduce education's share of GDP by three-quarters of a percentage point at constant prices; relative price movements would keep the reduction at current prices to about half a percentage point by 1979/80. The same situation would occur in Canada between 1976/77 and 1978/79 (Table 47). Belgian figures indicate a constant education share of GNP between 1970 and 1980 in real terms, but an increase of around 1 per cent at current prices. The Seventh Plan (1976-1980) in France predicts a stability of educational expenditure in the State budget (around 25.5 per cent) and in the GDP.

Lastly, the OECD Economic Policy Committee, in its study referred to above[10] looked into possible future trends in educational expenditure and projected the costs of formal education up to 1985. The findings are discussed below.

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[8] Ibid.

[9] "Bildungsgesamtplan", Bonn, 1974.

[10] *Public Expenditure on Education*, OECD, Paris, 1976.

b) Impact of policy decisions

In the OECD area education accounted on average for 3.6 per cent in 1965 to 4.7 per cent in 1975 of GNP at current prices (i.e. an elasticity of expenditure in relation to GNP of 1.45 in two-thirds of Member countries). During this period the share of public expenditure in GDP rose on average from 21.1 per cent to 39.9 per cent (an elasticity of 1.28). Future trends in public expenditure on education have to be seen in the context and as part of the already wide-ranging debate on the development of the role and scope of the public sector and of the State[11]; there are growing pressures for an increased involvement of this sector but also growing concern on political, economic as well as ethical grounds (individual privacy and freedom). Moreover, the trend will be subject to a number of known constraints, whether on the revenue side (limits to taxable capacity) or the expenditure side (a halt in the reduction— and likely stabilisation— of defence expenditure or the emergence of new social needs).

In any case, the share of GDP (around 1973-75) devoted to education varies considerably between industrialised Member countries (Table 47) i.e. from 3.0 per cent to 6.7 per cent. During the last fifteen years, the larger share of public resources allocated to education and to other "welfare programmes" has been mainly due to the broader scope of such programmes and the greater number of users (partly as a result of demographic trends). In future these factors are likely to be much less important, and the opportunity is therefore available for somewhat slower growth in these public expenditures while still meeting essential needs. On the other hand, a consideration of possible new initiatives, for example, to improve quality, class sizes and other educational facilities, suggests the possibility that over the ten years from 1975 to 1985 increased spending on these welfare programmes could increase their share of GDP.

To give some idea of what might be the implications of these changes for the evolution of educational expenditures, the Economic Policy Committee of the OECD provided illustrative projections based on three assumptions[12]:

i) a "no policy change" variant, which assumes the maintenance of present trends and policies, with specific allowance for changing demographic factors and relative price changes, but assuming no change in the present level of supply of education. Under these conditions, owing to demographic trends, the share of educational expenditure in GDP would rise by 1 per cent in nominal terms; in other words, owing to the steady decrease of relative prices (1.5 per cent), the share would decrease by half a percentage point in real terms;

ii) a second variant assumes that, in addition to demographic and relative price changes, some further modest expansion of student numbers will take place. The share of educational expenditure in GDP would then be steady, rising at the same rate as relative prices (1.5 per cent);

iii) finally, under a third variant, the levels in real resources per student would converge towards the "best situation"— for example, in the case of countries below the average, by reducing class sizes and improving educational facilities. In this situation the share of educational expenditure in GDP may increase by 2.2 per cent at current prices, i.e. by 0.7 per cent in real terms. Moreover "the adoption of a number of educational programmes falling outside the traditional system, such as compensatory and recurrent education as well as a more rapid expansion of pre-primary schooling, could add another 1 per cent of GDP to the cost of education over the next 10 years[13].

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[11] *Publlic Expenditure Trends*, OECD, Paris, 1978, Chapter I.
[12] *Public Expenditure Trends*, op.cit., page 31.

Given the kinds of uncertainty discussed previously, it is not at all clear which of these scenarios is the most likely. Obviously there will be pressures to upgrade the quality of the educational system by increasing expenditures per student, introducing compensatory programmes, improving teacher training[14], etc. This applies to improvements which are assumed to be needed at all levels of the educational system and for which there will be increasing pressures on the part of users, particularly parents and teachers. The debate on this is current in many countries.

In the present economic climate such pressures are likely to be resisted by those responsible for public budget policies against a background of competing pressures from other social sectors. In any case, it is clear that future public expenditure on education is never simply an extrapolation of past trends and that decisions are taken on the basis of multiple criteria which are not all " technical" or " internal" to the education system itself[15].

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[13] *Public Expenditure Trends*, op. cit., page 33.

[14] Particularly if one refers to long-term educational development programmes currently being elaborated in a number of countries, e.g. Netherlands, Denmark, Germany.

[15] These matters are discussed in greater detail in *Education Policies and Trends; A Report by a Group of Experts*. OECD, Paris, 1977.

VI

EDUCATION AND WORKING LIFE

In most OECD Member countries significant changes in the way young people enter working life have taken place in recent years. The most serious and visible manifestation of this changed situation is the rise in youth unemployment. Young people have been experiencing increasing difficulty in finding stable jobs and are at risk of becoming a marginal sector of the population. This situation has been precipitated by the current economic crisis and the falling demand for labour; it is also due to structural changes in labour markets and the education system and in employment. On top of the quantitative imbalance between labour supply and demand there is also a qualitative imbalance caused by the rise in educational levels and simultaneous changes in the structure of occupational qualifications. These changes must be considered in the light of structural adaptations to the world economy which Member countries are striving to introduce in the production and exchange sectors and thus in education and employment. The relationship between education and employment is very complex and in this chapter discussion will be limited only to the more important trends.

OUTFLOWS FROM THE EDUCATION SYSTEM

The total number of pupils leaving the education system[1] has increased in recent years owing to demographic changes (partly compensated for by the rise in school enrolment rates over the age of 16). This is the case, for example, in the Netherlands and in France (up to 1974) or in the United Kingdom (after the temporary reduction in the number of school leavers due to the prolongation of compulsory schooling in 1973) (Table 52). In some countries (e.g. United Kingdom in 1976) high unemployment encouraged young people to prolong their studies. Such delayed departure can only be a temporary phenomenon. The demographic trend shows that if departures are evenly spaced their numbers will continue to grow or stabilise at a high level up to 1985. Beyond that date they will be affected by the drop in the birth-rate since 1964 which will reduce the pressure of supply.

The distribution of these departures according to educational (and/or qualification) levels shows the very clear rise in these levels over the last few years (Tables 53, 54, 55 and 58). In the Netherlands, for example, the proportion of leavers from higher education rose from 20 to 36 per cent (men) and from 9 to 14 per cent (women) between 1971 and 1975. In France there was a big increase in the number of students obtaining technical qualifications. This development has modified the educational structure of the total working population of Member countries[2]. In the United States (Table 56) the average number of years of study carried out by people aged 25 and over rose by three years between 1950 and 1973. The proportion of those with more than 12 years of education went from 33.4 to 62.5 per cent. These trends, the effects of which will be discussed below, should continue and take on an irreversible character as shown by the projections carried out in some Member countries (Tables 56-57). In Sweden, for example, according to forecasts based on the 1970 census the proportion of the working population that has received eight years or less of education will drop from 46 per cent to 10 per cent by the year 2000. The number of graduates will go up from 7 to 18/19 per cent, with the percentage being higher for women than men. In the United States the percentage of the active population with higher education qualifications is expected to increase to 40 by 1990 compared with 27 per cent in 1970-72. In the United Kingdom the number of university graduates will have doubled between 1966 and 1981[3]. In Canada the percentage of the work force that had attended a post-secondary institution rose from 18 per cent to 30 per cent between 1961 and 1977; towards 1985 it is anticipated that this percentage will rise to between 36 per cent and 40 per cent[4].

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[1] These outflows are not fully understood because of the general lack of flow data in all except a few countries (Netherlands, United Kingdom, Canada, France, Germany) which will be referred to later.

THE TRANSITION FROM SCHOOL TO WORKING LIFE

The transition processes between the education system and working life are beginning to be analysed with some precision in several Member countries (Australia, the United States, the United Kingdom, France, Sweden) despite the complexity of the factors involved and their sensitivity to fluctuations in employment.

i) The labour force participation rate of young people aged 16-19 sharply declined during the sixties. Since 1970 this decline has slowed down and the percentage is tending to stabilise or even to go up in some countries (United States, Canada, Sweden and Norway). The participation rate of the age group 20-24 in the labour force has evolved in a similar fashion. During recent years there has been a stabilisation or even an increase in the level of labour force activity for both sexes but above all for women (Austria, Denmark, Italy, Norway and Sweden). Nevertheless, forecasts for 1980-85-90 assume the stabilisation of these rates[5].

ii) Young people who leave school at the end of compulsory schooling or who interrupt their secondary studies without having obtained an occupational qualification face the greatest difficulty in finding a job and are most liable to remain unemployed for longer durations. Yet enquiries show that their main motive for terminating their studies, apart from boredom with school, is to get a job and start earning. In general, the percentages of unemployment among the age group 16-19 is two to three times higher than the national averages. These percentages, which were stable and very low in the sixties, have greatly increased in the seventies, especially since 1974. It is true, of course, that youth unemployment is of shorter duration than that of adults, although continued recession has led to an increase in the average duration of unemployment. It is also true that when they do find a job, the young are likely to keep it for a shorter period than adults due to differential turnover rates. Examination of the rate of unemployment according to the level of educational attainment or qualifications reveals that— except in Italy and Britain— the unemployment rate among young people with the least education is much higher than the average youth unemployment rate; twice as much in Canada and the United States, 1.2 times more in Finland and France[6]. The jobs they obtain are mostly unskilled. In the United States (1971) for example, among high school dropouts, 60 per cent of boys worked as "operatives" or "labourers" and 50 per cent of girls had jobs as "operatives" or service workers[7].

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[2] *Entry of Young People into Working Life*, OECD, Paris, 1977.

[3] *Employment Prospects for the Highly Qualified*, HMSO, London, 1974.

[4] Z. Zsigmond et al., *Out of School Into the Labour Force, Trends and Prospects for Enrolment, School-Leavers and the Labour Force in Canada. The 1960s through the 1980s*, Statistics Canada, 1978.

[5] *Demographic Trends, 1950-1990*, op. cit. Annex II.

iii) Young people who leave the school system with a secondary certificate, particularly with a technical or vocational certificate (or one likely to facilitate the acquisition of a professional qualification) are much less vulnerable to unemployment or job instability. Their unemployment level is either lower (Finland, Sweden, United Kingdom, France), or close to the average youth unemployment rate (Canada, United States)[8]. In Italy it is very much higher. In the United States, for example, these young people are mostly employed as skilled workers or office workers (women)[9]. In France (1969-73) holders of technical education certificates quickly found jobs and the link between training and first job could be considered relatively satisfactory[10].

iv) Graduates from higher education are confronted with new problems affecting employment prospects for highly qualified jobs. In most cases, except perhaps in Italy, these people have been less subject to unemployment, but a growing number of them seem to be faced with "de-skilling" (see Table 44). The study of United States graduates already quoted shows that in 1971 almost 40 per cent of them had first jobs at a middle or lower level[11]. In Canada "equivalent jobs"— filled in 1973 by 81 per cent of under 30-year-old graduates— increased by 5 per cent per year between 1966 and 1977 while the number of graduates entering the labour market grew by 12 per cent per year. The rate for "equivalent jobs" fell to 3.5 per cent in 1976 and 2.2 per cent in 1977 for a 4 per cent increase in graduates those two years[12]. Until recently these graduates— in Europe at least— went essentially into public sector jobs. In West Germany, for instance, two-thirds of students who graduated between 1961 and 1970

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[6] *Youth Unemployment*, Vol. I., op. cit., Tables I-7 and I-8.

[7] *Entry of Young People into Working Life, Technical Reports*, OECD, Paris, 1977, pp. 356 and 357.

[8] *Youth Unemployment*, Vol. I., op. cit.

[9] *Entry of Young People into Working Life, Technical Reports*, op. cit., p. 356.

[10] "L'insertion professionnelle à la sortie du système scolaire", *Economie et Statistique*, September/October 1976.

[11] *Entry of Young People into Working Life*, op. cit., pp. 356-357.

[12] *Out of School Into the Labour Force*, op. cit.

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obtained their first job in the public sector (half of them in education)[13]. In France, in 1973, this was the case for 70-80 per cent of science and arts graduates, who virtually all went to work either in education or in research[14]. In the United Kingdom 23 per cent of university graduates in 1970 found their first employment in the civil service and 38 per cent in teaching (compared with 21 per cent and 13 per cent respectively in the case of the same years polytechnic graduates[15]. This trend is also noticeable in Sweden[16], but since 1972—following the reduction of the number of teacher posts—there has been a change, particularly among women, towards office jobs traditionally carried out by secondary school leavers. Nevertheless, up to the present time those with post-secondary qualifications have been less exposed to unemployment than other groups of young people[17], even if finding initial employment has become more difficult. Possession of a university degree is no longer a guarantee of stable and well-paid employment. However, in a few countries (e.g. Switzerland) the proportion of high-level jobs filled by graduates is at present relatively low (26%); but if the slow increase by 2.5 per cent forecast for 1985 is realised there should be enough of such jobs to maintain the chances of employment and promotion of new graduates and avoid undue competition between graduates and those without degrees[18].

EMPLOYMENT PROSPECTS AND THE STRUCTURE OF QUALIFICATIONS

Medium-term employment prospects are very uncertain. The high unemployment rates during the 1974/75 recession have subsequently fallen only slightly (except in the United States). Even in the event of a moderate upturn in consumer demand and production there is no assurance in the medium term of a strong upsurge in the demand for labour and a consequential substantial fall in aggregate unemployment, notably as concerns young people who are entering the workforce in increasing numbers and for whom the recruitment cost is higher. In such a perspective the evolution of the pattern of labour demand is hard to predict. In some Member countries planners are obliged to describe medium-term prospects in a very summary fashion, to relate the potential supply of jobs to available manpower and to adjust the zones of balance and imbalance. It may be assumed that the pattern of demand for skilled work (including the attitudes and expectations of the prospective employers) will not change significantly in the medium term. To the extent that a large majority of individuals are in work or in the education system and that the trends observed in recent years (increase in employment for women, rising educational levels of school leavers) are going to continue, the nature of the demand remains very uncertain. In recent years most new jobs (92 per cent in the United States between 1970 and 1975 for instance) have been created in the tertiary sector. The slight increase or stagnation in industrial jobs is not to be explained uniquely by the current situation and is likely to continue in the medium term[19]. It is structural in origin and stems particularly from the saturation of branches with heavy concentrations of labour, such as the motor car and building industries, and the increasing competition from a number of developing countries. In France, for example, planners believe that the employment of manual workers will stagnate as a result of a falling demand for unskilled labour and of a slight increase in the demand for skilled workers. At the technician level an excess demand is expected[20]. In the United Kingdom, employment forecasts up to 1981 anticipate a marked decline in jobs in primary industries, building construction and "labouring"[21]. It is in the tertiary sector, which constitutes 50 to 60 per cent of the work force, that the biggest increase in manpower demand is foreseen. Employment forecasts for this diverse sector are especially problematic. The potential for job creation is subject to varying constraints according to the sub-sector. Thus, commercial services are very sensitive to external changes, as well as being subjected to rationalisation schemes and productivity gains. Public services are dependent not only on budgetary policies and fluctuations in public expenditures but also on political and social pressures. Certain branches of the public sector, such as teaching and research, are near saturation and, in several, surpluses are already appearing. Additional jobs must, moreover, absorb as a priority categories of non-established personnel and allow for the reallocation of posts to people already within an organisation. In many countries, projections of supply and demand reveal a surplus of post-secondary qualifications which, in the case of the United States, could be of the order of one million during the period 1974-1985[22]. Such projections highlight the sharp fall in employment prospects for university graduates, above all in the public sector. According to the German study cited earlier, the situation noted in the past should change radically. As a result of budgetary constraints, low demand for teachers and researchers and—in certain states or local authority areas—the volume of public debt, the future expansion of public employment is likely to be very limited. Replacement demand is expected to absorb only about 15 per cent of university graduates between 1975 and 1985, compared with 30 per cent in 1970-75. The study indicates that less than half of these graduates will find an "adequate" job in either the public or the private sector in the next 10 years, with the others having to content themselves with work at a lower level.

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[13] *Entry of Young People into Working Life, Technical Reports*, op. cit., p. 310.

[14] Report by Prof. Hegelheimer for the Association of University Professors quoted by *Die Deutsche Universität*, July/August 1977.

[15] Early careers of graduates survey, *Employment Gazette*, N° 9, 1977, p. 947.

[16] G. Bergendal, "Higher Education and Manpower Planning in Sweden", The National Swedish Board of Universities and Colleges, 1977, p. 10.

[17] *Youth Unemployment*, Vol. I, op. cit.

[18] Troisième rapport sur le développement des Hautes Ecoles Suisses" Conseil Supérieur de la Science, Berne, 1978, p. 256.

Different prospects are seen for Sweden, however, where after a period of teacher shortage (1965-70), followed by excess (1970-75), a more balanced situation is now forecast, but not excluding the possibility of both shortages in some sectors (e.g. health, engineering) and a surfeit of candidates in others (e.g. education)[23]. Assumptions about the growth of the service sector, a major determining factor in calculating needs, are clearly extremely uncertain. However, the existence of discrepancies between aspirations and the jobs on offer is recognised. In order to narrow these discrepancies there has been an examination of the possibilities for mobility and substitution which could be created by measures affecting recruitment, career guidance, work-study schemes and recurrent education or financial incentives.

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[19] *Outlook for Employment in the European Community to 1980*, ECC, Brussels, 1976.

[20] *Rapport du Groupe de prévisions sur les relations entre la formation et l'emploi pendant le VIIe plan*, Comité de l'emploi, La Documentation française, Paris, 1976.

[21] *Young People and Work*, Manpower Services Commission, London, May 1977, Table VIII.

[22] Max Carey, "Revised occupational projections 1985", *Monthly Labor Review*, November 76, p. 20.

[23] G. Bergendal, "Higher Education and Manpower Planning in Sweden", op. cit.

Effects of rising educational levels

The raising of levels of education in the population as a whole is an irreversible social phenomenon, the consequences of which have already affected, and will continue to affect, social life, employment conditions and attitudes to work.

i) Economists have long stressed the widespread external effects that higher educational levels could have on the social, economic and cultural life of a nation. A person's cultural "consumption" is, for example, closely linked to his level of education. Recently, researchers have been able to set out, and even to try to quantify, the influence of educational levels on human behaviour[24]. Apart from salary and socio-economic status, the level of a person's initial education has been seen to affect such diverse aspects of life as the acquisition of further skills, choice of marriage partner, size of family and level of children's education, consumer behaviour, handling of savings, choice of household investments, political attitudes, degree of social deviation, choice of leisure activities, level of activity of women (other than those with young children) or time devoted to children. In general, education increases a person's knowledge, his or her capacity to solve problems in a rapidly changing world, his or her ability to plan for the future rather than be content with the present, and thus his or her capability to take important personal decisions. In addition, transfers from one generation to another take increasingly the form of cultural and human capital rather than one of merely money and property.

ii) Succeeding generations have benefited in a very unequal way from the rapid expansion of education of the past 20 years. In countries where the educational level was relatively low, disparities have increased[25]. On the other hand, as can be seen from the United States example, the gaps in educational levels between generations tend to narrow sharply with age (Table 56). The will to reduce these inequalities has brought official encouragement for training schemes whereby adults have access to post-compulsory studies and appropriate forms of recurrent education.

iii) The effect on productivity of the raising of levels of instruction is a highly controversial subject among educational economists. The human capital theory, whereby each supplementary educational unit acquired increases individual productive capacity, has been strongly contested[26];

iv) During recent years there have been many attempts to analyse the new attitudes to work in general and consequences of higher levels of instruction on the attitudes and aspirations of young people vis-a-vis working life[27]. These studies show that for a large majority of pupils, students and parents, education continues to be primarily a means of acquiring higher social status and a higher level of qualification than one's parents, even though professional objectives often remain vague. Although the numbers of young people rejecting conventional jobs and taking up marginal activities are low, it nevertheless appears that certain types of rejection— of industrial or manual work, or of repetitive tasks— are becoming more common among the more educated young. It has been argued that professional aspirations associated with certain types of diploma were based on: (*a*) the positions achieved by graduate groups in working life during recent years, i.e. at a time of relative security of higher education degrees and of shortage of highly skilled manpower; and (*b*) the professional situation of parents. The decline in opportunities of access to jobs or social positions equivalent to given levels of education may have contributed, initially, to the rejection of certain types of employment. Finally, research into work attitudes tends to stress the gap between school and working life, the shortcomings in educational content, the school's emphasis on academic studies which diverts the child from the acquisition of practical skills, from manual and productive work and from the exercise of responsibility. In any event, certain cases of rejection can be explained by unsatisfactory working conditions, the nature of certain kinds of work or by salary levels judged to be insufficient.

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[24] F.T. Juster, *Education, Income and Human Behavior*, Carnegie Commission on Higher Education and National Bureau of Economic Research, 1975, Part Two.

[25] For a measurement of these disparities see *Education, Equality and Life Chances*, OECD, Paris, 1976.

[26] For a summary of these discussions see J. Karabel and A.H. Halsey, *Power and Ideology in Education*, Oxford University Press, 1977.

[27] T. Husén, "Changing Attitudes to Education and Work among Youth", *The OECD Observer*, N° 90, January 1978, p. 16.

v) Higher educational levels—which are not necessarily concomitant with levels of qualification— are at the heart of highly controversial hypotheses about the trend towards down-grading of personnel on the one hand and "de-skilling" of jobs on the other. The argument of a growing "de-skilling" of jobs (increase in the percentage of unskilled jobs) is controversial and the analyses on this subject are often contradictory. In the medium term a stabilisation or slow reduction in the percentage of unskilled jobs can be expected. This tendency depends, however, on how the elements making up job qualification are perceived and defined. Qualification structures vary depending on the production structures of the various sectors and branches of the economy, on the restructuring which takes place, on the size and organisation of the work and on recruitment standards. Nomenclature and types of classifications used should also be taken into consideration.

The growing gap between levels of education and levels of work qualification has given rise to some pessimistic forecasts. According to the German study referred to above, the 50 per cent of university graduates who do not find satisfactory employment at their level will take technical or office jobs hitherto usually filled by secondary school leavers. The secondary school leavers will therefore be constrained to take jobs usually filled by less qualified workers who will, in their turn, be forced into marginal jobs or unemployment. This reasoning underlines the need for both the education and employment sectors to take the appropriate measures—in school or elsewhere—to offer all young people the chance of obtaining usable qualifications to prepare them effectively for working life, to create new jobs and to structure salaries so as to encourage the acquisition of qualifications. Behind all this lies the corresponding requirement for the structure of employment to evolve in such a way that the potential represented by the educational levels of the working population, particularly the younger generation, can be fully utilised.

SUMMARY

This report endeavours to analyse the changes in the socio-economic variables that influence the quantitative as well as the qualitative development of the education system.

It examines, on the one hand, effects of demographic changes and trends in social demand and, on the other, trends in the staff and financial resources that together determine the growth of enrolments as well as the functioning of the education system as a whole. Such analysis is all the more pertinent because of the radical changes which have recently occurred in the exponential model of educational development which prevailed during the sixties and the new demographic and economic context, as well as social and political uncertainties, against the background of which future perspectives for education will need to be to some extent defined.

In such a situation, planning instruments— particularly quantitative forecasts which become increasingly less trustworthy in periods of uncertainty— need to be rethought in more qualitative, sectoral and political terms.

DEMOGRAPHIC TRENDS

Demographic trends are marked by a clear drop in the birth-rate over the last 10 years in almost all Member countries. This has given rise to an unprecedented situation in two-thirds of Member countries, where the birth-rate is at present below the generation replacement threshold. Such a trend has important consequences for the development of educational policy.

i) The decrease in enrolments in compulsory education, already noted in some countries, will continue up to 1980-85. It will affect three-quarters of Member countries and will reach up to 15 per cent of enrolments in some of these countries during the eighties. The secondary and higher levels will be affected in their turn. Teaching conditions will thus be directly affected: teacher and building requirements as well as total expenditure will be reduced; a teacher surplus will therefore be created and a proportion of school accommodation will remain unutilised. Education policy will, in consequence, be increasingly preoccupied with resolving the problems arising out of this situation and with the redeployment and reallocation of resources between the various educational levels affected by differing, sometimes conflicting, growth patterns. This situation could provide opportunities for policy interventions in order to improve pupil/teacher ratios and the general quality of the service.

ii) This demographic trend will have more indirect, but not less important, implications. The ageing of the population will alter the social environment in which young people will live and increase the social burden on the working population— with education having increasingly to compete with other social services (health, etc.) for its share of public expenditure. Professional mobility will thereby be reduced and the entry and leaving rates of the working population, as well as internal and international labour movements, will be modified. The supply of young people on the labour market will decrease towards the middle of the 1980s as a result of this situation.

DEVELOPMENTS IN ENROLMENTS AND FACTORS AFFECTING DEMAND

From 1960 to 1975 total enrolments increased by 35 per cent, those in secondary education by 58 per cent and those in higher education more than doubled. Growth rates, which rise with the level of education, have tended to decrease over time, particularly from 1970. The identification of factors influencing supply and demand reveals very diverse situations, depending on the level of education, but makes it possible nonetheless to postulate a number of hypotheses concerning possible future developments.

i) Varying levels of enrolments in ***pre-school education*** suggest that the future development of this sector will differ greatly from country to country. Over the last 10 years a strong demand for greater schooling opportunities for and socialisation of young children as well as child-care facilities has been noted. This is a result of several factors, such as the increase in female employment, modifications in living conditions and family structures, the desire to remedy the educational deficiencies of certain socio-economic groups as well as the results of psychological/genetical studies which have shown the importance of the first years of life and environmental factors on the socialisation of the child. Apart from those few countries where this sector is already advanced, this demand is likely to continue and will be accompanied by specific efforts to improve pupil/teacher ratios and teacher qualifications, develop appropriate pedagogical approaches and introduce greater co-ordination of the relevant services, including closer involvement of families.

ii) *Compulsory education.* Stabilisation, followed by decrease, in enrolments will characterise this level up to the mid-eighties. The effects of this trend could be attenuated in some countries either by lowering the compulsory school starting age to 5 or by extending the school leaving age to 16. Necessary adjustments to the system and its resources (teachers, buildings, etc.) to allow for this development will need to be sought. This level of education is also beset by a variety of other problems: rejection of school by some pupils, lowering of standards and poor results in examinations, repeating and the continuing importance of social background in scholastic success, etc. The stabilisation or diminution in enrolments provides an opportunity to consolidate the remarkable benefits which have already been achieved at this level of education, to rethink the objectives and functions of basic schooling and the learning process and to adapt educational content to meet new social requirements and the development needs of children and adolescents, and in particular of those who have to face special difficulties (handicapped, migrants' children, etc.).

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iii) *Upper secondary education.* Enrolments at this level have grown strongly, especially in the technical and vocational sectors, and this trend should continue during the next few years. 40-65 per cent of young people aged 15-19 years are currently enrolled at this level, i.e. 5-10 per cent more than in 1970. The development of this sector will depend, more than in the past, on the employment situation of young people. High unemployment should prompt young people to delay departure from the education system or to obtain a professional qualification to guard against risks of unemployment or under-utilisation of skills. Pupils' motivation has a marked influence on study choices, which are themselves still strongly associated with social background or sex. Supply factors also play a determinant role as a result of the proliferation of policy measures for training and employment aimed at establishing closer links between education and work, at improving the transition and alternation between study and work, at strengthening technical education and career guidance facilities and, in certain cases, at encouraging young people to continue their education.

iv) *Post-secondary education.* A different trend seems likely to develop at this level. The strong growth in enrolments during the sixties has slowed down markedly since 1970. The most significant cause is a drop in the transfer rate of secondary school leavers to universities as well as an increased propensity by students to take short-cycle or vocationally oriented higher studies (which have more selective access in Europe). A possible reason for the drop in demand in the university is the decline in the access opportunities to high level jobs or the low employment prospects for holders of certain types of degree. Demand for post-secondary places is not expected, in the short term, to drop further; but any increase will be very slow and will be marked by clear changes in its composition: decreased demand among "traditional" students and as a result of the application of selective measures will be accompanied by an increase in demand from "new groups" and a broadening of the "recruitment base" of higher education establishments.

v) This situation should stimulate increased participation by *adults*, which has, in any case, grown markedly over the last few years. The participation of adults depends on their initial educational level and is very unevenly distributed between socio-economic levels. Existing facilities and financial or legislative incentives are expected to be extended and increasingly integrated into a more comprehensive and systematic scheme of provision, at least in some countries. Such a scheme should go some way to meeting the strong potential demand for vocational studies linked to employment prospects but also for socio-cultural studies linked to the evolution of knowledge and living conditions as well as to increased participation in social and professional life.

TRENDS IN RESOURCE ALLOCATION TO EDUCATION

It is difficult to project future trends in education resource allocation for they depend essentially on policy choices. *Staff resources* increased by about one-third during the 1960s, thus making it possible for shortages to be filled and for improvements to be made in the pupil/teacher ratio and in the levels of teacher qualifications. But the relationship which prevailed at that time between supply and demand now tends to be the inverse. The drop in pupil numbers gives rise to new imbalances, upsets recruitment patterns and training policies and leads to surpluses of teaching personnel. A variety of solutions are being considered, depending largely on available funds. They range from determined efforts in some countries to improve the ratio of teachers to pupils and raise the level of in-service teacher training to a concern in other countries to stabilise the situation by cutting down on recruitment and on the places available in training establishments. In most cases governments envisage a more careful control of supply and demand, and a policy of reallocating teachers by academic level; however, in order to avoid the danger of shortages in the longer term, a degree of surplus is sometimes tolerated and used to improve the quality of services. ***Public expenditure*** on education increased on average by one percentage point of the GDP during the 1960s. Since 1970 this growth has slowed markedly, particularly in expenditures on primary education, on buildings and equipment and on teacher training. The budgetary restrictions imposed since 1975 have encouraged this trend, but in widely differing ways, in many Member countries. At present, public expenditure on education absorbs between 3 and 7 per cent of GDP. Medium-term expenditure forecasts vary greatly according to country, and are too dubious to be used as a basis for planning. In addition, how these trends will develop depends on the role envisaged in different countries for the public sector and the State as well as overall budgetary constraints. The hypothesis retained in the Secretariat analysis is that the new programmes on pre-school , compensatory and adult education and the pressures brought to bear by the users could, by 1985, increase educational spending by one percentage point of GDP.

RELATIONS BETWEEN EDUCATION AND WORKING LIFE

In recent years— at least in some countries— there have been significant increases in the flows from the educational system into the labour market— this is due primarily to increases in the age groups concerned. The interrelationships between education and employment are highly complex and poorly understood, making forecasting and planning particularly difficult. On the one hand, a slack labour market discourages the acquisition of human capital by implying a fall in the " rate of return" to education. On the other hand, many young people tend to prolong their education, such as when they feel discouraged about job prospects. Since youth unemployment is expected to remain rather high in the OECD area until at least 1982, these various " push/pull" factors may cancel each other. But on top of the expected quantitative imbalance between labour supply and demand there are emerging qualitative imbalances between the demands of the market and the output of schools. Job aspirations among young people are felt to be raised by the schools above levels sustainable by the labour market; conversely, the employment sector has not adequately responded to the rising levels of education among the working population, resulting in increased under-utilisation of the skills and capacities of the labour force. For these reasons, most Member countries are seeking ways to improve the transition between school and working life.

Annex

STATISTICAL TABLES

Table 1

EDUCATIONAL ENROLMENTS IN OECD COUNTRIES

(Millions)

	1960	1965	1970	1975
Primary	70.2	72.4	77.0	75.1
Secondary	45.6	56.3	64.8	72.2
Higher	6.3	9.7	14.4	17.0
TOTAL	122.1	138.4	156.2	164.3

SOURCE: Educational Statistics, OECD, forthcoming.

These data relate to all OECD Member countries except Yugoslavia. Except in certain cases they concern full-time enrolments only. For some countries the missing data have been estimated.

Table 2

ENROLMENT RATES FOR THREE AGE GROUPS IN OECD MEMBER COUNTRIES*

(Percentage of the total population of the age group)

	1960	1970	1975
5-14	84	92	93
15-19	39	53	57
20-24	7	12	14

* Includes Yugoslavia.

SOURCE: OECD educational data file.

Table 3

ANNUAL GROWTH RATES IN ENROLMENTS IN OECD COUNTRIES

(%)

	1960 to 1965	1965 to 1970	1970 to 1975	1960 to 1970	1960 to 1975
Primary	0.6	1.2	- 0.5	1.0	0.5
Secondary	4.3	2.9	2.2	3.6	3.1
Higher	9.0	8.2	3.4	8.6	6.8
TOTAL	2.5	2.4	1.0	2.5	2.0

SOURCE: Based on Table 1.

Table 4

ANNUAL GROWTH RATES IN ENROLMENT RATES IN OECD MEMBER COUNTRIES

(%)

AGE GROUP	1960 to 1970	1970 to 1975	1960 to 1975
5-14	0.9	0.2	0.7
15-19	3.2	1.5	2.6
20-24	5.5	3.1	4.7

SOURCE: Based on Table 2.

Table 5

ENROLMENTS BY LEVEL OF STUDY

(Thousands)

	PRE-PRIMARY	PRIMARY	SECONDARY	HIGHER
Australia				
1960	...	1,500*	555*	...
1965	...	1,450*	770*	...
1970	101	1,680	954	111
1975	187	1,604	1,096	175
1977	203	1,644	1,116	189
Austria				
1960	80	399	461	39
1965	...	471	450	50
1970	120	532	653	63
1975	154	502	756	98
1977	169[4]	467	770	111
Belgium				
1960	405	919	561	52
1965	443	980	688	84
1970	459	1,022	712	139
1975*	439	959	795	158
Canada				
1960	146	2,559	1,565	163
1965	230	2,864	2,066	274
1970	350	2,925	2,557	476
1975	398	2,555	2,637	592
1976	391	2,475	2,627	603
Denmark				
1960	...	...	...	29
1965	3	363	417	48
1970	21	372	441	69
1975	45	403	447	96
1976	49	392	455	98
Finland[1]				
1960	20	547	352	35
1965	21	463	427	56
1970	28	389	502	75
1975	60	413	494	94
1976	65	439	459	98

Table 5 (cont'd)

	PRE-PRIMARY	PRIMARY	SECONDARY	HIGHER
France				
1960	1,374	4,915	3,128	282
1965	1,778	4,867	3,931	525
1970	2,213	4,799	4,546	810*
1975	2,591*	4,602*	4,997	1,015
1976	2,599	4,568	5,073	1,052*
Germany				
1960	...	3,152	3,490	270
1965	10	3,498	3,764	345
1970	33	4,025	4,830	545
1975	88	4,021	6,027	836
1976	83	3,749	6,324	872
Greece [1]				
1960	40	922	328	...
1965	52	976	313	64
1970	87	920	564	86
1975	108	937	700	117
1976	109	933	...	...
Iceland [1]				
1960	...	23*	...	...
1965	...	...	...	1
1970	...	27	21	2
1975	4	26	26	3
Ireland				
1960	144	359	...	...
1965	114	386	143	21
1970	130	390	209	26
1975	136	405	271	33
Italy				
1960	1,154	4,340	2,187	284
1965	1,335	4,480	3,060	425
1970	1,587	4,857	3,836	710
1975	1,822	4,835*	4,892	982
1976	1,789	4,742	5,056	1,021
1977	1,822			

Table 5 (cont'd)

	PRE-PRIMARY	PRIMARY	SECONDARY	HIGHER
Japan				
1960	742	12,591	9,126	703
1965	1,137	9,776	11,039*	1,080*
1970	1,675	9,494	8,969	1,665
1975	2,292	10,365	9,119	2,076
1977	2,454	10,820	9,387	2,196
Luxembourg				
1960	5	28	18	1
1965	6	31	21	2
1970	8	31	31	2
1975	9	31*	22	3
Netherlands				
1960	398	1,416	764	84
1965	457	1,409	858	120
1970	492	1,462	1,006	178
1975	519	1,454	1,284	231
1976	499	1,448	1,331	248
New Zealand				
1960	...	325	220	...
1965	28	367	264	19
1970	41	400	304	31
1975	55	393	351	34
1976	58	395	359	36
Norway				
1960	...	430	...	22*
1965	9	412	234	37
1970	13	368	316	52
1975	30	391	329	70
1976	36	397	333	71
Portugal				
1960	7	886	226	24
1965	11	892	323	35
1970	17	930	502	54
1975	45	909	767	72
1976		903	774	79
Spain				
1960	525*	2,344	1,178	143
1965	611	2,729	1,670	274
1970	820	3,216	2,527	366
1975	920	3,653	3,156	549
1976	956	3,624	...	...

Table 5 (cont'd)

	PRE-PRIMARY	PRIMARY	SECONDARY	HIGHER
Sweden				
1960	49	738	390	...
1965	64	656	500	...
1970	111	650	549	152
1975	172	713	533	135
1976	...	709	545	139
Switzerland				
1961	90*	577	157	27
1967	...	580	196	41
1969	140	612	205	47
1976	132	503	618	72
Turkey				
1960	3	2,867	476	65
1965	3	3,932	701	97
1970	8	5,012	1,309	170
1974	...	5,355	1,517	219
United Kingdom				
1960*	...	4,982	3,620	176
1965	257	5,212	3,647 *	315*
1970	302	5,852	4,065	454
1975	370	5,726	4,766	515
1976	367	5,640	5,782	526
United States[2]				
1960	2,294[5]	23,041[5]	16,678[5]	3,583
1965	3,577	25,548	20,739	5,526
1970	4,279	25,486	23,263	7,920
1975	5,141	22,821	24,407	8,665
1977	5,450[4]	19,554	21,379	6,793
Yugoslavia[3]				
1960	...	1,706	1,421	...
1965	...	1,632	2,061	...
1970	...	1,573	1,958	184
1975	188	1,491	2,235	242
1976	...	1,461	2,304	...

NOTES:

1. Including part-time enrolments for secondary and higher education. 2. Including part-time enrolments for higher education. 3. Including part-time enrolments for secondary education. 4. 1976. 5. 1959.

* Estimates.

SOURCE: Educational Statistics, OECD, forthcoming.

Table 6

ANNUAL GROWTH RATE IN ENROLMENTS IN PRIMARY, SECONDARY AND HIGHER EDUCATION

(%)

	1960-65	1965-70	1960-70	1970-75	1965-75
Australia					
Primary	-0.7	3.0	1.1	-0.9	1.0
Secondary	6.8	4.4	5.6	2.8	3.6
Higher	...	...	...	9.5	...
Austria					
Primary	3.4	2.5	2.9	-1.2	0.7
Secondary	-0.5	7.7	3.5	3.0	5.3
Higher	5.1	4.5	4.8	9.4	7.0
Belgium					
Primary	1.3	0.8	1.1	-1.3	-0.2
Secondary	4.1	0.7	2.4	2.2	1.5
Higher	10.1	10.6	10.3	2.6	6.5
Canada					
Primary	2.3	0.4	1.4	-2.7	-1.1
Secondary	5.7	4.3	5.0	0.6	2.5
Higher	10.9	11.7	11.3	4.5	8.0
Denmark					
Primary	...	0.5	...	1.6	1.0
Secondary	...	1.1	...	0.3	0.7
Higher	11.0	7.6	9.3	6.9	7.2
Finland (including part-time)					
Primary	-3.3	-3.4	-3.4	1.2	-1.1
Secondary	3.9	3.3	3.6	-0.3	1.5
Higher	9.9	6.0	7.9	4.5	5.3
France					
Primary	-0.2	-0.3	-0.2	-0.8	-0.4
Secondary	4.7	2.9	3.8	1.9	2.4
Higher	13.2	9.1	11.1	4.6	6.8
Germany					
Primary	2.1	2.8	2.5	-0.1	1.4
Secondary	1.5	5.1	3.3	4.5	4.9
Higher	5.0	9.6	7.3	8.9	9.3

Table 6 (cont'd)

	1960-65	1965-70	1960-70	1970-75	1965-75
Greece					
Primary	1.1	-1.2	0.0	0.4	-0.4
Secondary	-0.9	12.5	5.6	4.5	8.4
Higher	...	6.2	...	6.4	6.2
Ireland					
Primary	1.5	0.2	0.8	0.8	0.5
Secondary	5.5	7.9	6.6	5.3	6.6
Higher	8.0	4.4	6.2	4.9	4.6
Italy					
Primary	0.6	1.6	1.1	-0.1	0.8
Secondary	6.9	4.6	5.8	5.0	4.8
Higher	8.4	10.8	9.6	6.7	8.7
Japan					
Primary	-4.9	-0.6	-2.8	1.8	0.6
Secondary	3.9	-4.1	-0.2	0.3	-1.9
Higher	9.0	9.0	9.0	4.5	6.8
Netherlands					
Primary	-0.1	0.7	0.3	-0.1	0.3
Secondary	2.3	3.2	2.8	5.0	4.1
Higher	7.4	8.2	7.8	5.4	6.8
New Zealand					
Primary	2.5	1.7	2.1	-0.3	0.7
Secondary	3.7	2.9	3.3	2.9	2.9
Higher	...	10.8	...	1.6	6.0
Norway					
Primary	-0.8	-2.2	-1.5	1.2	-0.5
Secondary	...	6.2	...	0.8	3.5
Higher	11.2	7.4	9.3	6.0	6.6
Portugal					
Primary	0.1	0.8	0.5	-0.5	0.2
Secondary	7.4	9.2	8.3	8.8	9.0
Higher	7.4	9.2	8.3	5.6	7.5
Spain					
Primary	3.1	3.3	3.2	2.6	3.0
Secondary	7.2	8.6	7.9	4.5	6.6
Higher	13.9	6.0	9.9	8.4	7.2

Table 6 (cont'd)

	1960-65	1965-70	1960-70	1970-75	1965-75
Sweden					
Primary	-2.3	-0.2	-1.3	1.9	0.8
Secondary	5.1	1.9	3.5	-0.6	0.6
Higher	...	...	...	-2.3	...
Switzerland[1]					
Primary	0.1	2.7	0.7	-2.8	-1.6
Secondary	3.8	2.3	3.4	17.0	13.6
Higher	7.2	7.1	7.2	6.3	6.5
Turkey					
Primary	6.5	5.0	5.7	1.7[2]	3.5[3]
Secondary	8.1	13.3	10.7	3.8[2]	8.9[3]
Higher	8.3	11.9	10.0	6.5[2]	9.5[3]
United Kingdom					
Primary	0.9	2.3	1.6	-0.4	0.9
Secondary	0.2	2.2	1.2	3.2	2.7
Higher	12.4	7.6	10.0	2.6	5.0
United States					
Primary	1.7[4]	-0.1	0.9[5]	-2.2	-1.1
Secondary	3.7[4]	2.3	3.1[5]	1.0	1.7
Higher	9.1	7.5	8.3	1.8	4.6
Yugoslavia					
Primary	-0.9	-0.7	-0.8	-1.1	-0.9
Secondary	7.7	-1.0	3.3	2.7	0.8
Higher	...	...	...	5.6	...

1. 1961-67 ; 1967-69 ; 1961-69 ; 1969-76 ; 1967-76.
2. 1970-74.
3. 1965-74.
4. 1959-65
5. 1959-70.

SOURCE: OECD educational data file.

Table 7

ENROLMENT RATES BY AGE GROUPS

(%)

	5-14	15-19	20-24
Australia			
1960	88.7	36.6	1.2
1970	91.5	38.6	3.0
1975	91.2	46.1	5.5
Belgium			
1960	96.7	37.9	6.0
1970	98.2	53.5	8.7
1975	99.4	61.3	11.1
Canada			
1960	86.0	49.2	7.0
1970	97.1	70.2	15.6
1975	97.2	66.4	14.5
France			
1960	95.0	32.5	7.3
1970	99.5	45.2	9.6
1975	99.8	51.3	9.9
Germany			
1960	79.4	34.7	6.9
1970	86.6	47.5	10.2
1975	87.5	51.3	11.1
Italy			
1960	68.0	18.7	4.9
1970	92.0	31.6	8.6
1975	93.1	40.8	10.8
Japan			
1960	94.0	39.4	4.8
1970	97.7	64.3	12.0
1975	97.6	76.3	14.5
Netherlands			
1960	96.2	30.6	5.8
1970	98.1	43.9	8.8
1975	99.2	57.5	12.3

Table 7 (cont'd)

	5-14	15-19	20-24
Norway			
1960	77.6	37.4	9.3
1970	78.8	60.1	16.5
1975	78.8	63.4	19.3
Portugal			
1960	57.0	12.6	4.7
1970	67.6	19.5	7.1
1975	74.1	29.6	11.4
Sweden			
1960	79.0	36.9	15.5
1970	78.5	56.0	16.1
1975	82.3	57.1	14.4
United Kingdom			
1960	97.6	16.6	4.9
1970	99.5	33.9	6.1
1975	100.0	43.9	7.5
United States			
1960	90.0	64.1	12.1
1970	97.3	74.4	19.8
1975	99.4	72.0	21.6

SOURCE: OECD educational data file.

Table 8

ANNUAL GROWTH RATE IN ENROLMENTS BY AGE GROUP

(%)

		5-14	15-19	20-24
Australia	1960-70	0.3	0.5	9.6
	1970-75	-0.1	3.6	12.9
Belgium	1960-70	0.2	3.5	3.8
	1970-75	0.2	2.8	5.0
Canada	1960-70	1.2	3.6	8.3
	1970-75	0.0	1.1	-1.5
France	1960-70	0.5	3.4	2.8
	1970-75	0.0	2.6	0.6
Germany	1960-70	0.9	3.2	4.0
	1970-75	0.2	1.6	1.7
Italy	1960-70	3.1	5.4	5.8
	1970-75	0.2	5.3	4.6
Japan	1960-70	0.4	5.0	9.6
	1970-75	0.0	3.5	3.9
Netherlands	1960-70	0.2	3.7	4.3
	1970-75	0.2	5.5	6.9
Norway	1960-70	0.2	4.9	5.9
	1970-75	0.0	1.1	3.2
Portugal	1960-70	1.7	4.5	4.0
	1970-75	1.9	8.7	9.9
Sweden	1960-70	-0.1	4.3	0.4
	1970-75	0.9	0.4	-2.2
United Kingdom	1960-70	0.2	7.4	2.2
	1970-75	0.1	5.3	4.2
United States	1960-70	0.8	1.5	5.0
	1970-75	0.4	-0.7	1.8

SOURCE: Based on Table 7.

Table 11

PRIVATE RATES OF RETURN BY EDUCATIONAL LEVEL DURING THE 60s

(%)

COUNTRY	YEAR	SECONDARY	HIGHER
Belgium	1967		17.0
Canada	1961	16.3	19.7
Denmark	1964	...	10.0
Germany	1964	...	4.6
Greece	1964	5.0	14.0
Japan	1961	6.0	9.0
Netherlands	1965	8.5	10.4
New Zealand	1966	20.0	14.7
Norway	1966	7.4	7.7
Sweden	1967		10.3
Turkey	1968	24.0	26.0
United Kingdom	1966	6.2	12.0
United States	1959	19.5	13.6

SOURCE: G. Psacharopoulos, Return to Education, an International Comparison, Elsevier 1973, page 62.

Table 9

ENROLMENT RATES BY AGE

(%)

		14	15	16	17	18	19	20	21	22	23	24
stralia												
B	1970	99.2	83.4	56.0	38.9	22.5	14.8	11.3	9.3	7.8	5.9	5.4
B	1975	99.3	93.2	74.8	69.3	56.5	44.4	34.1	12.2	9.7	7.7	6.8
G	1970	98.7	78.9	48.2	28.6	12.4	7.3	5.0	2.9	2.0	1.4	1.1
G	1975	98.6	92.4	66.8	52.2	33.0	26.5	20.3	7.2	4.5	3.3	2.8
stria												
T	1970	97.9	54.1	32.3	23.5	16.2	11.6	9.1	7.8	6.3	4.4	4.6
T	1977	100.0	57.8	36.6	28.9	19.9	14.1	11.4	10.4	9.6	8.7	9.9
G	1970	100.0	57.1	34.0	21.7	15.2	10.9	6.2	4.0	3.8	2.0	2.3
G	1977	100.0	61.8	41.6	30.8	19.7	12.4	9.3	8.2	7.1	6.1	5.8
gium												
B	1970	90.2	88.9	71.7	57.0	41.0	29.9	22.2	17.5	11.9	7.9	5.4
B	1975	96.1	93.4	80.5	65.8	48.6	36.1	26.0	20.4	14.0	9.7	7.3
G	1970	90.1	90.3	66.5	51.8	32.5	21.1	12.9	8.0	3.6	2.1	1.0
G	1975	95.7	93.8	77.2	63.6	43.1	29.5	18.6	11.5	5.5	2.9	1.7
ance												
T	1971	90.0	90.4	62.7	45.3	30.6	21.8	14.8	11.9	9.4	7.5	5.6
T	1977	98.0	93.5	68.7	53.5	34.5	22.4	15.1	11.6	9.7	8.1	7.0

Table 9 (cont'd)

		14	15	16	17	18	19	20	21	22	23	24
Germany												
T	1970	92.3	55.4	31.3	19.1	12.9	9.6	8.4	8.2	8.0	6.5	6.
T	1977	100.0	82.2	51.3	30.8	22.5	16.1	13.8	14.5	14.7	12.9	11.
Ireland												
T	1971	84.7	70.8	55.1	39.4	20.6	12.0	7.4				
T	1976	95.6	86.3	68.6	46.0	27.2	15.3	11.7	8.0	5.2	3.6	2.
G	1971	84.1	73.4	59.4	43.3	20.9	10.0	4.5				
G	1975	95.5	88.1	76.4	51.4	29.4	13.5	9.1	5.9	3.4	2.2	1.
Italy												
T	1976	76.2	57.6	51.6	43.2	36.2	29.2	23.1	20.1	17.9	14.2	10.
G	1976	71.6	54.1	48.9	39.5	33.0	14.1					
Japan												
T	1971	99.9	83.8	80.0	74.8	29.5	22.0	13.8	13.7	0.9	1.1	0.
T	1977	100.0	93.1	87.2	87.9	43.9	40.9	25.1	25.4	1.3	1.1	0.
G	1971	99.9	85.2	78.9	75.0	22.7	15.9	5.5	5.0	0.2	0.2	-
G	1977	99.9	(92.6)	77.5			33.2	12.4	10.5	0.3	0.2	-
New Zealand												
B	1970	96.8	88.0	69.6	49.8	41.0	33.0	27.8	...	...	...	..
B	1975	104.9	94.3	67.2	49.7	41.6	34.6	28.8	...	...	...	..
G	1970	98.7	81.9	56.5	31.7	22.4	16.5	10.9	...	...	...	..
G	1975	106.7	92.4	63.9	35.6	23.5	20.1	15.1	...	...	...	..

Table 9 (cont'd)

			14	15	16	17	18	19	20	21	22	23	24
Norway*													
T	1970	.....	97.7	92.8	72.0	58.4	45.0	31.6	22.0	19.4	16.4	13.2	11.
T	1975	.....	99.7	99.4	76.4	62.1	49.3	32.6	22.4	23.7	23.9	22.2	18.
Portugal													
B	1970	.....	29.2	27.9	24.3	21.0	19.9	16.6	12.2	7.9	6.8	5.7	5.
B	1975	.....	42.3	34.6	32.4	31.4	28.6	26.0	21.7	14.0	10.1	8.9	7.
G	1970	.....	23.9	22.2	19.4	16.6	14.7	12.2	9.5	7.4	6.6	4.9	3.
G	1975	.....	41.0	33.4	31.1	29.2	25.7	22.6	18.4	11.8	8.5	7.4	6.
Spain													
T	1970	.....	55.8	40.5	34.9	27.3	23.8	21.3	23.3	14.6	10.4	9.5	9.
T	1975	.....	65.7	50.0	46.9	38.4	30.7	24.7	27.1	17.4	11.8	10.5	10.
G	1970	.....	44.9	29.5	23.2	17.2	13.3	11.3	14.1	6.7	3.7	3.1	3.
G	1975	.....	59.4	39.9	38.2	30.7	23.1	17.7	19.4	14.1	6.6	4.9	4.
Sweden													
B	1970	.....	97.9	93.0	70.7	51.3	43.8	28.5	20.4	17.2	16.7	15.6	14.
B	1975	.....	100.0	97.8	75.7	63.1	37.9	17.5	12.9	14.4	15.3	14.6	12.
G	1970	.....	98.5	94.7	69.7	51.5	36.9	23.7	21.2	19.0	16.1	12.5	9.
G	1975	.....	100.0	97.4	73.0	61.3	31.3	18.3	19.7	18.7	15.2	11.7	9.
Switzerland													
T	1977	.....	98.1	92.2	76.3	72.0	63.9	46.0	24.6	15.4	12.3	10.6	8.
G	1977	.....	97.5	91.0	68.2	60.4	50.2	33.8	19.4	11.0	7.3	5.8	4.

Table 9 (cont'd)

		14	15	16	17	18	19	20	21	22	23	24
United Kingdom												
T	1971	100.0	71.4	41.6	25.8	17.4	7.2					
T	1975	100.0	98.6	58.4	28.6	17.8	8.9					
G	1971	100.0	73.6	41.2	24.9	15.8	5.2					
G	1975	100.0	96.8	59.9	29.5	17.2	7.4					
United States												
B	1970	98.6	97.8	94.2	88.2	60.3	47.5	46.4	38.7	24.5	20.5	18.4
B	1975	98.8	98.0	94.9	86.1	56.5	42.9	37.1	33.6	23.6	20.5	16.1
G	1970	98.6	97.5	92.8	84.2	47.7	35.0	26.6	20.7	12.3	8.7	6.9
G	1975	98.5	97.5	93.2	81.2	49.6	38.3	29.6	25.2	16.1	11.4	10.3

NOTES:

B = Boys.

G = Girls.

T = Total.

( ) = Estimates.

* Figures for Norway include part-time enrolments.

SOURCE: OECD educational data file.

Table 10

GROWTH RATES IN SELECTED COMPONENTS OF NATIONAL ACCOUNTS

(%)

COUNTRY	GDP		HOUSEHOLD INCOME		CURRENT RECEIPTS OF GENERAL GOVERNMENT		PUBLIC EXPENDITURE ON EDUCATION	
	65-70	70-75	65-70	70-75	65-70	70-75	65-70	70-75
Austria	5.1	3.9	5.0	5.4	2.1	2.5	5.5	5.5
Canada	4.8	4.6	6.3	7.8	6.9	5.0	12.4	1.9
Denmark	4.4	2.1	...	...	...	...	4.8	2.5
Finland	5.2	4.0	5.5	7.2	4.9	4.5	8.0	3.6
France	5.8	3.6	...	5.5	...	2.3	5.4	3.0
Germany	4.7	1.7	5.9	3.2	3.1	0.6	7.1	5.5
Ireland	4.8	2.7	...	...	...	...	1.8	5.7
Italy	6.0	2.2	...	4.2	6.4	3.5	5.6	2.9
Japan	11.5	5.4	10.2	8.1	8.7	1.9	4.8	6.4
Netherlands	5.7	3.1	...	4.9	...	3.9	4.0	5.0
New Zealand	2.7	3.8	...	...	...	...	...	...
Norway	4.6	4.4	...	...	...	5.1	16.3	0.7
Portugal	6.1	4.7	8.5	8.1	7.6	7.3	8.3	27.0
Spain	6.4	5.5	...	6.2	...	15.7	8.2	1.7
Sweden	4.0	2.3	4.5	4.1	5.2	2.7	9.8	1.0
Switzerland	3.7	0.8	...	...	...	2.8	0.7	6.3
United Kingdom	2.3	2.0	2.7	4.2	4.9	-0.8	3.2	7.6
United States	3.1	2.1	4.9	3.1	4.0	1.0	7.6	1.8
TOTAL	4.4	2.8	5.4	4.2	4.6	1.7	7.0	2.9

NOTE: Basic data are at constant prices (1970 = index 100).

SOURCES: i) National Accounts of OECD Countries, 1976, Vol. II, detailed tables.

ii) Educational Statistics, OECD, forthcoming.

Table 12

TREND IN BIRTHS
(Projections without migration)

(Thousands)

	1950	1960	1965	1970	1975	1980	1985	1990
Australia[a]	191	230	223	258	233	237	250	260
Austria	108	126	130	112	94	100	106	106
Belgium[a]	143	156	155	141	119			
Canada[a]	372	479	419	370	359	400	428	414
Denmark	80	76	86	71	72	71	72	73
Finland[a]	98	82	78	65	67	70	68	64
France	858	816	862	848	743	889	869	864
Germany[a]	791	969	1,044	811	601	(584)	(636)	(640)
Greece[a]	151	157	151	145	142			
Iceland[a]	3.9	4.9	4.7	4.0	4.4	5.2	5.0	6.1
Ireland	64	60	63	64	66	69	72	
Italy	909	923	1,018	917	842	842	928	935
Japan	2,338	1,606	1,839	1,948	1,915	1,964	1,796	1,797
Luxembourg	4.1	5.0	5.3	4.4	4.0	4.1	4.1	3.9
Netherlands	229	239	245	239	178	159	168	169
New Zealand	49	63	60	62	57	56	54	52
Norway	62	62	66	65	56	53	54	55
Portugal	206	214	210	173	176			
Spain	559	655	668	656	669	696	725	761
Sweden[a]	115	102	123	110	104	100	106	108
Switzerland	85	94	112	99	79	121	126	137
Turkey	(912)	(1,246)	(1,264)	(1,428)	(1,381)	1,436	1,578	1,637
United Kingdom[a]	818	918	998	904	698	828	946	971
Unit[illegible]s[a]	3,645	4,307	3,801	3,739	3,144	3,654	3,986	3,972
Yugoslavia	488	434	(408)	383	390	397	414	429
Total	13,274	13,106	14,033	12,689	12,197			
Partial Total[b]					11,760	12,658	13,338	13,461

a. Projection with migration. In the case of Australia, Belgium, Canada and the USA net migration is assumed to be positive, in Germany and the UK negative, and in Finland, Greece, Iceland and Sweden, zero on a net basis.

b. Excluding Belgium, Greece, Ireland and Portugal.

( ) Estimates by the Secretariat.

SOURCE: *Demographic Trends 1950-1990*, OECD, forthcoming.

Table 13

TOTAL FERTILITY RATE 1950 TO 1975

	1950	1955	1960	1965	1970	1975
Australia	306	327	344	297	281	229
Austria	...	221	263	268	232	186
Belgium	234	238	255	260	225	176
Canada	344	382	388	318	233	195[3]
Denmark	258	255	254	260	195	193
Finland	314	293	272	240	184	174
France	293	268	273	283	247	190
Germany	207	212	239	249	202	143
Greece	...	246[1]	220	223	242	233
Iceland	...	...	...	366	...	...
Ireland	...	326	331	396	384	353
Italy	...	236	227	262	240	211
Japan	362	236	200	214	208	194
Luxembourg	...	213	223	240	197	155
Netherlands	307	304	311	303	258	172
New Zealand	338	372	403	333	333	252
Norway	248	272	283	289	251	198
Portugal	304	291	318	303	269	...
Spain	...	248	283	287	286	266
Sweden	227	223	217	240	194	179
Switzerland	256	227	234	253	209	167
Turkey	...	595[2]	...	...	...	...
England/Wales	218	221	265	280	243	180
Scotland	243	252	287	295	251	189
Northern Ireland ...	...	...	349	...	313	250
United States	309	358	366	293	249	184
Yugoslavia	415	314	279	270	228	228

NOTES:

1. 1951-1956.
2. 1950-1955.
3. 1974.

SOURCES: Data for 1970 and 1975 are taken from J. Bougeois-Pichat, "Baisse de la fécondité et descendance finale", Population, November/December, 1976.
Data for 1950-1965 have been calculated on the basis of the U.N. Demographic Yearbook, 1965 edition (Table 30) and 1969 edition (Table 31). These two tables show the gross reproduction rate which should be multiplied by 205 to obtain the fertility rate.

Table 14

TREND IN BIRTH RATES

	1950	1960	1970	1975	1980	1985	1990
Australia	2.33	2.24	2.04	1.69	1.56	1.69	1.65
Austria	1.56	1.79	1.51	1.25	1.33	1.41	1.41
Belgium	1.66	1.70	1.46	1.21			
Canada	2.71	2.68	1.74	1.57	1.63	1.62	1.47
Denmark	1.87	1.66	1.44	1.42	1.38	1.38	1.39
Finland	2.45[a]	1.85	1.41	1.42	1.46	1.40	1.30
France	2.05	1.79	1.67	1.41	1.63	1.55	1.51
Germany	1.65	1.75	1.32	0.97	0.97	1.08	1.10
Greece	2.00	1.89	1.65	1.57			
Iceland	2.71	2.79	1.96	2.02	2.20	2.25	2.19
Ireland	2.16	2.15	2.17	2.17	2.09[b]	2.07[c]	
Italy	1.94	1.84	1.71	1.51	1.47	1.59	1.57
Japan	2.82	1.72	1.93	1.72	1.66	1.45	1.41
Luxembourg	1.39	1.59	1.29	1.11	1.15	1.16	1.11
Netherlands	2.26	2.08	1.83	1.30	1.15	1.20	1.18
New Zealand ...	2.59	2.65	2.19	1.85	1.73	1.60	1.49
Norway	1.90	1.73	1.68	1.40	1.31	1.32	1.34
Portugal	2.43	2.36	1.92	1.82			
Spain	2.00	2.15	1.94	1.87	1.87	1.86	1.84
Sweden	1.64	1.36	1.37	1.27	1.30	1.27	1.29
Switzerland	1.80	1.76	1.60	1.23	1.89	1.95	2.09
Turkey	4.40	4.51	4.04	3.47	3.22	3.16	2.94
United Kingdom .	1.62	1.75	1.63	1.25	1.47	1.66	1.67
United States ...	2.40	2.38	1.82	1.47	1.64	1.72	1.63
Yugoslavia	3.02	2.35	1.78	1.83	1.78	1.78	1.78
Average	2.21	2.10	1.80	1.59			
Average excluding Belgium, Greece, Ireland and Portugal				1.57	1.61	1.62	1.54

NOTES:

a. Births for Finnish nationals in Finland only, denominator includes resident aliens.

b. For the years 1976-1981.

c. For the years 1981-1986.

SOURCE: Demographic Trends 1950-1990, op.cit.

Table 15

ENROLMENTS IN THE 0-14 AGE GROUP IN 1970 AND 1980 IN TWO SUCCESSIVE FORECASTS

(Thousands)

	1970			1980		
	SOURCE A	SOURCE B	DIFFERENCE (%)	SOURCE A	SOURCE B	DIFFERENCE (%)
Belgium[1]	2,283	2,273	- 0.4	2,033	2,077	+ 2.2
Canada[1]	6,500	6,447	- 0.8	6,472	5,633	- 13.0
Denmark	1,148	1,148	0.0	1,132	1,106	- 2.3
Finland	1,151	1,134	- 1.5	966	987	+ 2.2
France	12,553	12,572	+ 0.1	13,750	(12,733)	- 7.4
Germany[2]	14,278	14,058	- 1.5	14,502	(10,935)	- 24.6
Italy	13,250	13,093	- 1.2	13,824	12,949	- 6.3
Netherlands	3,549	3,558	+ 0.2	3,771	3,045	- 19.2
Norway	948	949	+ 0.1	1,097	896	- 18.3
Sweden	1,671	1,677	+ 0.4	1,705	1,682	- 1.3
Turkey	14,691	14,750	+ 0.4	17,803	16,910	- 5.0
United Kingdom[1]	13,432	13,367	- 0.5	14,039	11,961	- 14.8
United States[3]	59,305	57,881	- 2.4	59,763	49,916	- 16.5

NOTES:

1. Including migrations.
2. Includes West Berlin throughout.
3. Includes Alaska and Hawaii throughout.

( ). Estimates by the Secretariat.

SOURCES: A old forecast: Demographic Trends 1970 to 1985 in OECD Member Countries, OECD, Paris, 1974.

B new forecast: Based on Demographic Trends 1950-1990, op. cit.

Table 16

GROWTH INDEX FOR THE 5-14 AGE GROUP FROM 1950 TO 1970 (1950 = 100) AND FROM 1970 TO 1990 (1970 = 100)

	1950-1970	1970-1990
Australia	189	101
Austria	114	82
Belgium	141	87
Canada	187	90
Denmark	107	92
Finland	114	86
France	151	103
Germany	111	65
Greece	98	101
Iceland	173	122
Ireland	113	120
Italy	105	98
Japan	88	119
Luxembourg	127	78
Netherlands	135	67
New Zealand	187	90
Norway	131	83
Portugal	110	110
Spain	131	116
Sweden	106	97
Switzerland	140	80
Turkey	194	132
United Kingdom	130	89
United States	166	88
Yugoslavia	114	104

SOURCE: Demographic Trends 1950-1990, op.cit.

Table 17

INDEX BY 5-YEAR PERIODS OF ENROLMENTS IN THE 5-14 AGE GROUP

(Starting year of each period = 100)

	1970 to 1975	1975 to 1980	1980 to 1985	1985 to 1990
Australia	103	102	97	99
Austria	105	87	89	100
Belgium	97	93	97	100
Canada	93	88	100	109
Denmark	103	96	95	108
Finland	94	88	98	106
France	101	99	102	101
Germany	107	81	76	98
Greece	105	99	96	101
Iceland	100	95	114	112
Ireland	106	101	103	107
Italy	107	97	95	100
Japan	106	110	107	96
Luxembourg	100	86	91	100
Netherlands	102	91	84	86
New Zealand	103	97	96	94
Norway	104	99	89	91
Portugal	102	96	105	107
Spain	105	98	105	107
Sweden	105	99	96	98
Switzerland	103	90	88	98
Turkey	106	110	106	107
United Kingdom	104	92	88	105
United States	93	90	97	109
Yugoslavia	99	98	103	104

SOURCE: Demographic Trends 1950-1990, op. cit.

Table 18

TRENDS IN SCHOOL ENROLMENTS BETWEEN 1975 AND 1980, BY AGE GROUP

(%)

	5-14	15-19	20-24
Australia	2.4	9.0	12.4
Austria	- 12.1	15.6	32.4
Belgium	- 7.6	14.3	25.9
Canada	- 11.8	2.8	21.9
Denmark	9.8	12.2	16.8
Finland	- 4.1	18.9	8.3
France	- 0.7	9.7	0.2
Germany	- 30.1	33.6	32.5
Greece	0	4.8	18.1
Ireland	3.4	29.6	35.1
Italy	2.6	65.2	44.0
Japan	10.4	9.2	2.2
Luxembourg	- 12.6	1.2	- 6.0
Netherlands	- 6.9	24.5	27.3
New Zealand	2.7	16.3	26.2
Norway	- 2.1	11.9	18.6
Portugal	11.3	107.5	89.9
Spain	5.0	74.7	45.9
Sweden	14.0	8.2	- 3.9
Switzerland	- 7.5	7.6	2.4
Turkey	21.6	27.0	26.6
United Kingdom	- 9.9	26.0	35.0
United States	- 11.6	3.0	12.0
Yugoslavia	2.5	2.9	8.2
Total	- 3.0	14.3	20.5

SOURCE: OECD educational data file.

Table 19

PROPORTION OF PEOPLE AGED 65 OR MORE TO EACH 100 PEOPLE OF LESS THAN 15 YEARS

	1950	1960	1970	1980	1990
Australia	30	28	29	36	42
Austria	46	55	58	73	70
Belgium	53	51	57	66	67
Canada	26	22	26	40	47
Den[illegible]rk	34	42	53	66	73
Finland	22	24	37	56	58
France	50	44	52	58	59
Germany	40	51	57	85	90
Greece	24	31	45	57	60
Iceland	25	23	27	32	31
Ireland	37	36	36	36	34
Italy	30	37	44	57	60
Japan	15	20	30	36	49
Luxembourg	47	51	57	77	77
Netherlands	26	30	37	52	74
New Zealand ...	31	26	26	33	42
Norway	39	42	53	66	83
Portugal	24	28	32	42	42
Spain	28	30	35	40	40
Sweden	44	52	66	80	92
Switzerland	41	43	49	67	76
Turkey	9	8	10	12	12
United Kingdom .	48	50	54	50	67
United States ...	30	30	35	49	54
Yugoslavia	18	20	29	36	37

SOURCE: Demographic Trends 1950-1990, op.cit.

Table 20

ENROLMENT RATES IN PRE-PRIMARY EDUCATION

	1970			1975		
	3 YEAR OLD	4 YEAR OLD	5 YEAR OLD	3 YEAR OLD	4 YEAR OLD	5 YEAR OLD
Australia	-	-	84.3	-	-	83.5
Belgium	89.6	97.1	99.9	93.7	98.4	100.0
Canada	3.0	14.8	95.5	32.2		86.7
France	60.8	86.8	100.0	81.7[1]	99.4[1]	100.0[1]
Germany	-	-	-	-	0.1[1]	2.8[1]
Ireland	-	57.0[2]	92.0[2]	0.8[3]	62.3[3]	98.4[3]
Italy	53.1	65.8	69.0	70.4[3]		
Japan	4.3	38.2	57.9	6.6[1]	48.3[1]	63.8[1]
Netherlands ...	0.2	83.5	95.5	0.3	89.0	97.0
New Zealand ..	26.4	43.3	100.0	27.5[1]	60.5[1]	100.0[1]
Norway	4.3	3.9	5.2	8.0	5.7	7.3
Portugal	-	4.2	4.2	6.3[3]		10.4[3]
Spain	11.8	43.0	68.8	18.3	49.3	70.2
Sweden	4.6[2]		6.0[2]	10.8[4]	11.1[4]	11.1[4]
United Kingdom.	2.5	34.0	99.2	3.5	44.0	100.0
United States ..	14.1	29.4	84.3	21.8	37.4	88.3
Yugoslavia	-	-	-	7.8	10.4	14.5

NOTES:

1. 1977. 2. 1969. 3. 1976. 4. 1974.

SOURCE: Based on Educational Statistics Yearbook, Vol. II, OECD, Paris, 1975.
Educational Statistics, OECD, forthcoming.

Table 21

BELGIUM - PERCENTAGE OF REPEATERS BY PROFESSION OF THE HEAD OF FAMILY
(Primary education 1973/74)

	AVERAGE	UPPER MANAGE-MENT	TEACHERS	MIDDLE MANAGE-MENT	LOWER MANAGE-MENT	FARMERS	SKILLED WORKERS	UNSKILLED WORKERS	RETAILERS CRAFTSMEN
1st Year	19.4	4.9	5.7	12.2	11.9	12.2	17.4	25.0	18.8
2nd Year	25.5	4.4	8.6	8.3	9.2	29.3	26.4	33.8	21.0
3rd Year	31.4	2.3	5.9	14.0	18.6	24.5	32.1	40.1	21.5
4th Year	34.7	5.4	4.8	17.9	22.8	36.1	35.4	47.2	34.5
5th Year	35.7	12.5	4.5	15.4	24.5	28.3	38.8	42.8	31.8
6th Year	37.1	10.9	14.3	21.0	25.3	37.2	36.0	43.0	29.9

NOTE: Percentage differences from one year to the next are due to the fact that the table is not based on cohorts but on a situation at a given time.

SOURCE: "De la réussite et du choix des études suivant l'origine sociale des étudiants", Etudes et documents, Service statistiques et programmation n° 9, 1974, Ministère de l'Education nationale et de la Culture française, Belgium.

Table 22 (a)

SWEDEN - AVERAGE MARKS OBTAINED IN PRINCIPAL SUBJECTS IN 6th YEAR OF BASIC SCHOOLING FOR PUPILS BORN IN 1953, BY SOCIAL BACKGROUND AND SEX

SOCIAL BACKGROUND	AVERAGE MARKS		
	BOYS	GIRLS	TOTAL
Profession requiring a degree ...	3.88	3.88	3.88
Upper management	3.46	3.68	3.50
Other management and office workers	3.21	3.39	3.30
Skilled workers	3.09	3.36	3.23
Other manual workers	2.86	3.14	2.99
Unknown	2.79	3.05	2.92
Total	3.08	3.33	3.20

Table 22 (b)

SWEDEN - PROPORTION OF PUPILS BORN IN 1953 CHOOSING, IN 9th YEAR OF BASIC SCHOOLING, THE SECTION LEADING TO THE GYMNASIUM, BY AVERAGE MARKS OBTAINED IN 6th YEAR, SOCIAL BACKGROUND AND SEX

SOCIAL BACKGROUND	BOYS				GIRLS			
	-2.99	3.00-3.49	3.50-3.99	4.00 or +	-2.99	3.00-3.49	3.50-3.99	4.00 or +
Profession requiring a degree	50	76	84	96	53	89	94	99
Upper management ...	22	60	76	95	25	60	78	94
Other management and office workers ..	7	38	77	92	12	46	73	91
Skilled workers	6	19	58	77	4	28	66	86
Other manual workers.	5	21	51	84	6	33	52	82
Unknown	4	29	63	82	7	35	70	86
Total	7	32	64	89	9	40	65	89

SOURCE: Information i prognosfragor, 1976, 6, "Social background and theoretical studies in upper secondary schools", Tables 7.1 and 7.3, Sveriges officiella statistik.

Table 23

NETHERLANDS - RELATION BETWEEN ACTUAL VERTICAL FLOW TO HIGHER AND INTERMEDIATE SECONDARY EDUCATION AND EXPECTED VERTICAL FLOW ON GROUNDS OF DISTRIBUTION ACCORDING TO ACHIEVEMENT SCORES, PER SOCIAL BACKGROUND

SOCIAL BACKGROUND	(1) EXPECTED NUMBER OF VERTICAL FLOW PUPILS ON GROUNDS OF ACHIEVEMENT SCORES	(2) ACTUAL NUMBER OF VERTICAL FLOWS	PERCENTAGE OF (2) TO (1)
Boys			
Unskilled workers	11	5	45.5
Skilled workers	41	26	63.4
Junior non-manual	45	44	97.8
Tradesmen - own account	29	30	103.4
Farmers and market gardeners ..	17	21	123.5
Intermediate non-manual	32	36	112.5
Senior personnel	38	51	134.2
Total	213	213	100.0
Girls			
Unskilled workers	5	0	0
Skilled workers	28	16	57.1
Junior non-manual	38	37	97.4
Tradesmen - own account	19	23	121.1
Farmers and market gardeners ..	13	8	61.5
Intermediate non-manual	25	29	116.0
Senior personnel	26	41	157.7
Total	154	154	100.0

SOURCES: ITS. Kropman and Collaris, Van Jaar tot Jaar, Nijmegen, March, 1974; Social and Cultural Report 1976, Social and Cultural Planning Office. Rijswijk.

Table 24

ENROLMENTS IN TRANSFER TYPES OF SECONDARY EDUCATION AS PROPORTION OF ALL FULL-TIME ENROLMENTS IN UPPER SECONDARY EDUCATION (1960-1975)

COUNTRY	1960	1965	1970	1975
Austria	66.0	68.0	52.2	55.2
Belgium[a]	50.8	48.7	60.1[b]	...
Canada	88.0	87.5	84.3	...
Denmark	...	43.0	47.6	60.2[c]
France	72.6[d]	61.7[d]	68.2	67.9[e]
Germany	59.8	54.7	61.1	59.5[e]
Greece	84.0	76.4	81.2	77.5[c]
Italy	83.6	83.8	80.9	80.2[c]
Luxembourg	71.9	71.1	57.9	...
Netherlands	30.4	32.3	33.5	44.3[f]
Norway	...	62.4	61.0	56.3[f]
Portugal	53.2	50.0	51.7	69.2
Spain	56.1	49.9	56.5	...
Turkey	80.9	80.2	87.6	86.3[c]
Yugoslavia	71.0	68.4	55.6[g]	61.2[c,g]

NOTES:

a. Excluding pupils of lower and vocational grades (terminal education).
b. 1969 and excluding pupils of music education (terminal education).
c. 1973.
d. Excluding pupils of private agricultural education (transfer and terminal education).
e. Provisional.
f. 1974.
g. Excluding pupils of "Skolski Centre".

SOURCE: "Trends and Policy Issues", Vocational Education and Training, OECD, forthcoming.

Table 25

ENROLMENTS IN SECONDARY TECHNICAL EDUCATION AS PROPORTION OF ALL ENROLMENTS IN FULL-TIME UPPER SECONDARY EDUCATION

(1960-1975)

COUNTRY	1960	1965	1970	1975
Austria	56.5	52.3	63.2	64.0
Belgium	37.1	41.8	37.5[a]	...
Canada	31.8	38.7	...	...
Denmark	...	31.4	22.5	20.9[b]
France	29.6	38.3	48.0	53.6[c]
Greece	15.9	23.6	18.8	22.5[b]
Italy	58.5	60.4	59.1	63.9
Netherlands	40.3	39.0	40.3	37.8[d]
Norway	...	38.3	39.6	43.7[d]
Portugal	48.4	52.0	50.3	42.2[d]
Spain	45.5	53.6	46.4	38.3[d]
Sweden	19.8	37.4	...	...
Turkey	15.8	15.4	9.9	...
Yugoslavia	59.2	62.7	70.8[e]	72.1[e]

NOTES:

a. 1969.

b. 1973.

c. Provisional.

d. 1974.

e. Excluding pupils of "Skolski Centre".

SOURCE: "Trends and Policy Issues", Vocational Education and Training, OECD, forthcoming.

Table 26

PROBABLE DEMAND FOR UPPER SECONDARY EDUCATION BY GROUPS OF PUPILS WITH SPECIFIC CHARACTERISTICS

	UPPER SECONDARY				LABOUR
	GENERAL		TECHNICAL		
	ENTERING	GRADUATION	ENTERING	GRADUATION	
High SES - High achievers	xxxx	xxxx			
High SES - Medium achievers	xxxx	xxx			
High SES - Low achievers	xx	x	x	x	x
Medium SES - High achievers	xxx	xx	x	xx	
Medium SES - Medium achievers	xx	xx	xx	xx	
Medium SES - Low achievers			xx	x	xxx
Low SES - High achievers	xx	x	xx	xxx	
Low SES - Medium achievers			xxx	xx	xx
Low SES - Low achievers					xxxx

SES : Socio-economic status.

SOURCE: This table has been prepared on the basis of the findings in the studies on Individual Demand for Education, op.cit.

Table 27

DISTRIBUTION OF PUPILS BY SOCIAL BACKGROUND IN THE DIFFERENT TYPES AND LEVELS OF STUDIES, 1973/74

	PRIMARY	LOWER SECONDARY			UPPER SECONDARY		
		GENERAL	TECHNICAL	VOCA-TIONAL	GENERAL	TECHNICAL	VOCA-TIONAL
Upper management public sector	0.80	1.80	0.20	-	2.40	0.80	0.50
Upper management private sector	5.50	8.00	1.40	0.20	10.60	2.70	2.30
Legal profession	0.40	0.60	0.10	0.20	1.20	0.30	-
Medical profession	0.90	1.40	0.20	-	2.10	0.20	-
Teacher	5.00	6.10	1.40	0.60	5.70	5.90	2.30
Middle management	5.60	8.20	3.60	1.20	8.10	5.40	3.40
Lower management	19.00	23.20	14.40	10.60	27.50	20.30	21.00
Farmers and farmworkers	2.30	3.00	4.80	6.10	3.60	7.80	8.50
Skilled workers	26.90	24.00	31.70	35.10	17.00	21.80	29.00
Unskilled workers	24.30	13.70	30.10	36.30	10.00	19.80	18.20
Tradesmen	7.10	7.80	8.00	6.00	9.10	10.10	10.80
Artistic profession	0.40	0.40	0.40	0.60	0.40	0.50	-
Without profession	1.40	1.30	3.30	2.00	1.90	4.10	4.00
Undefined	0.40	0.50	0.40	1.10	0.40	0.30	-
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: "De la réussite et du choix des études suivant l'origine sociale des étudiants", Etudes et documents, Service statistiques et programmation n° 9, 1974, op. cit. p. 53.

Table 28

FRANCE - SOCIO-PROFESSIONAL BACKGROUND OF PUPILS IN PUBLIC SECONDARY SCHOOL

(1973/74)

	3rd YEAR LOWER SECONDARY	1st YEAR UPPER SECONDARY	1st YEAR VOCATIONAL
Farmers	7.6	6.5	6.3
Farmworkers	1.9	0.9	2.3
Owners industry/ commerce	9.6	10.9	6.4
Professions/ upper management ..	8.3	14.6	1.2
Middle management ...	10.5	14.7	4.1
Office workers	12.0	12.8	10.8
Manual workers	34.9	27.0	44.8
Service workers	3.0	2.3	4.2
Other	3.3	3.8	2.7
Without profession	4.4	3.9	6.8
Orphans	0.6	0.3	1.3
Undefined	3.8	5.5	9.1
TOTAL = 100	526,243	261,353	347,869

SOURCE: Tables on education and training 1975 in Statistiques des enseignements No. 9 1976, Ministry of Education, Paris.

Table 29

GERMANY - PERCENTAGE OF PUPILS AND FIRST-YEAR STUDENTS IN 1972, GROUPED ACCORDING TO FATHER'S OCCUPATION AND TYPE OF SCHOOL ATTENDED

FATHER'S OCCUPATION	10-TO-UNDER-15-YEAR-OLD JUVENILES	10-TO-UNDER-15-YEAR-OLDS ATTENDING SHORT-COURSE SECONDARY SCHOOLS	10-TO-UNDER-15-YEAR-OLDS ATTENDING INTERMEDIATE SCHOOLS	10-TO-UNDER-15-YEAR-OLDS ATTENDING GRAMMAR SCHOOLS	FIRST-YEAR STUDENTS ATTENDING UNIVERSITIES (WINTER TERM 71/72)
Unskilled worker	23.7	29.8	18.3	5.4	3.7
Not gainfully employed	5.4	6.5	3.8	2.8	2.6
Skilled worker	26.1	29.7	25.2	13.0	8.0
Self-employed farmer	6.1	6.9	5.6	3.6	3.6
Employee	20.2	14.7	23.4	38.4	34.5
Self-employed (excluding farming)	10.6	7.3	14.1	20.1	23.1
Civil servant/judge	7.9	5.2	9.4	16.6	24.5
Total	100.0	100.0	100.0	100.0	100.0

SOURCE: Individual Demand for Education, Vol. II, Case Studies - Germany, OECD, forthcoming.

Table 30

SWEDEN - CHOICE OF 3 AND 4-YEAR STREAMS IN THE GYMNASIUM FOR STUDENTS HAVING LEFT BASIC SCHOOLING IN 1972 BY SOCIAL BACKGROUND AND SEX

SECTIONS	PROFESSIONS REQUIRING A DEGREE	UPPER MANAGEMENT	OTHER MANAGEMENT AND OFFICE WORKERS	SKILLED WORKERS	UNSKILLED WORKERS	UNKNOWN	TOTAL
Boys							
Arts (H)	7	3	5	4	6	10	5
Social sciences (S) ...	8	8	8	7	9	14	8
Science (N)	54	34	34	32	30	51	36
Total H, S, N ...	69	46	47	43	44	75	49
Economics (E)	12	19	15	13	17	-	15
Technical (T)	19	35	38	44	39	25	35
Total E, T	31	54	53	57	56	25	51
TOTAL	100	100	100	100	100	100	100
Girls							
Arts (H)	28	26	32	18	31	21	28
Social sciences (S) ...	35	19	25	32	24	10	25
Science (N)	28	34	23	28	18	31	26
Total H, S, N ...	91	79	80	78	73	62	79
Economics (E)	8	13	15	22	27	38	17
Technical (T)	1	8	5	-	-	-	3
Total E, T	9	21	20	22	27	38	21
TOTAL	100	100	100	100	100	100	100

SOURCE: Cf. Table 22.

Table 31

ITALY - DISTRIBUTION BY SOCIAL BACKGROUND OF CANDIDATES FOR THE FINAL EXAMINATION IN THE DIFFERENT UPPER SECONDARY SCHOOLS 1973

	GROUP 1	GROUP 2			GROUP 3			WITHOUT PROFESSION	TOTAL
	OWNERS PROFES-SIONALS	MANAGE-MENT	EMPLOYEES	TOTAL	INDEPEN-DANT WORKERS	WORKERS	TOTAL		
1973									
Technical schools	29.8	19.8	39.1	35.7	46.7	61.1	54.7	51.9	45.9
Training of primary school teachers ..	10.4	10.0	16.1	15.0	18.6	17.6	18.0	16.7	16.3
Scientific lycées	26.3	31.9	22.4	24.1	15.1	9.0	11.7	13.4	17.3
Classical lycées	29.8	35.5	17.8	20.9	11.0	5.3	7.8	10.5	14.3
Vocational and art schools	3.7	2.8	4.6	4.3	8.6	7.1	7.8	7.5	6.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1963									
Technical schools	35.0	..	..	42.0	..	..	54.8	27.4	47.6
Training of primary school teachers ..	13.4	..	..	19.6	..	..	24.4	41.1	21.4
Scientific lycées	13.9	..	..	12.4	..	..	6.3	4.3	9.5
Classical lycées	37.7	..	..	26.0	..	..	14.5	27.2	21.5
Vocational and art schools	-	-	-	-	-	-	-	-	-
Total	100.0			100.0			100.0	100.0	100.0

SOURCE: Indagine speciale sui diplomandi delle scuole secondari superiori, Supplemento al Bollettino mensile di statistica, Anno 1975, n° 8, Istituto Centrale di Statistica.

Table 32

TREND IN DISPERSION INDEXES OF SCHOOL RATES BY REGION

(In some Member countries)

Unweighted standard deviation ($\bar{V}$) and coefficient of variation (c)

		$\bar{V}$	c(%)	$\bar{V}$	c(%)
Australia (1)	1965-6	2.4	16.2		
	1970-1	5.7	28.0		
	1973-4	6.4	27.0		
		(2)		(3)	
Canada	1960-1	8.14	11.9	2.0	25.9
	1965-6	8.50	11.05	2.48	22.1
	1970-1	10.48	11.73	2.37	13.7
	1972-3	10.39	11.87	1.75	13.6
		Male		Female	
West Germany (4)	1964	1.48	15.7	0.91	15.4
	1974	4.39	18.6	3.46	22.8
		(5)		(6)	
Italy	1964-5	5.02	23.7	1.91	33.6
	1971-2	6.08	13.4	3.00	24.2
		(7)		(8)	
Yugoslavia	1960-1	9.81	11.5	2.48	107.0
	1973-4	9.39	10.5	4.21	33.1

School rates:

1. Of the 16-19 age group (8 states or territories).
2. In secondary education (14-17 years of age) (10 provinces).
3. Full-time higher education (18-24 age group).
4. Graduates from Gymnasia (11 Länder).
5. Upper secondary education (19 regions).
6. Of which general secondary education (19 regions).
7. 16-19 age group (8 republics).
8. 20-24 age group.

These school rates by region have been calculated on the basis of national statistics.

NOTE: The unweighted standard deviation does not take into account the varying sizes of the school population in each region; the coefficient of variation is the ratio between the standard deviation and the arithmetic mean of the school rates. The growth of these indexes over time indicates an increase in disparities; their decrease shows an attenuation of them.

SOURCE: Education and Regional Development, Vol. I, General Report, OECD, forthcoming.

Table 33 (a)

PROPORTION OF GIRLS ENROLLED IN POST-COMPULSORY SECONDARY EDUCATION (FULL-TIME)

	TYPE (a)		TYPE (b)	
	1970	1975	1970	1975
Austria	42.5	46.0	51.5	54.1
France	51.6	55.1	49.9	46.3
Germany	40.0	43.8	57.8	60.2
Italy	40.3	43.1	47.1	49.5
Netherlands	...	44.4	...	43.1
Norway	47.1	49.6	39.7	47.5
Spain	41.5	47.0	27.6	38.6

Type (a) preparing for entry into university-type higher education.

Type (b) intended primarily to be terminal.

Table 33 (b)

PROPORTION OF GIRLS ENROLLED IN UNIVERSITY AND NON-UNIVERSITY HIGHER EDUCATION

	NON-UNIVERSITY		UNIVERSITY	
	1970	1975	1970	1975
Austria	57.1	67.8	25.0	33.6
France	31.7	36.9	38.8	44.7
Germany	12.8	24.8	30.6	35.9
Italy	46.7	49.8	37.0	38.6
Netherlands	...	39.2	...	25.0
Norway	48.2	49.3	28.5	36.0
Spain	32.0	62.5	25.9	37.0

SOURCE: Educational Statistics Yearbook, Vol. II, op.cit.

Table 34

YOUTH UNEMPLOYMENT RATES

(a) Global rates

	1970	1973	1975	1976	1977
Australia	2.5	3.8	(8.9)	9.0	..
Austria[1]	1.4	1.4	1.4	(1.4)	..
Canada[2]	10.3	9.7	12.2	12.5	14.5
Finland[3]	3.0	4.5	4.3	(8.3)	(14.9)
France	1.5	2.9	7.6	..	11.7
Germany[4]	0.3	1.0	5.8	(5.2)	(5.4)
Italy[5]	10.2	12.6	12.8	(14.4)	23.8
Japan	2.0	2.3	3.0	3.1	(3.2)
Spain	2.3	6.7	10.5	12.5	..
Sweden[6]	2.8	5.3	3.6	3.6	4.3
United Kingdom[7, 8]	2.7	(2.9)	(7.4)	(13.1)	(14.1)
United States[6]	9.9	9.8	15.2	14.0	12.9

1. Unemployed aged less than 30, labour force aged 14-24 for the years 1970-73 and 15-19 for years 1975-76.
2. Revised series from 1975; 1975 rate for the old series was 12.7
3. Revised series from 1976.
4. Unemployed aged less than 25, labour force aged 15-24.
5. Rate for 14-24-year-olds.
6. Rate for 16-24-year-olds.
7. Unemployed aged less than 25, labour force aged 16-24.
8. Rate for Great Britain.

Figures in brackets are Secretariat estimates.

SOURCE: "Diagnosis", Youth Unemployment, Vol. I, op.cit.

(b) Rates by level of education (some examples)

		PRIMARY (OR COMPULSORY)	SECONDARY (UPPER)			HIGHER		
						2	NON-UNIVERSITY	UNIVERSITY
Canada[1]	1969	18.3		8.9		4.3	3.1	
	1974	18.1		10.6		8.9	4.4	5.7
	1975	26.5		13.1		7.9	6.2	4.8
	1976	23.9		14.0		8.3	6.8	4.7
	1977	25.0		16.0		12.6	7.9	7.3
United States[3]	1970	13.5[4]		7.6			6.4	3.4
	1973	15.2[4]		8.8			6.7	5.0
	1974	17.2[4]		9.4			5.9	4.2
	1975	27.7[4]		16.0			10.8	6.4
	1976	24.4[4]		14.8			9.1	6.4
France[5]	1972	9.7	10.8[6]	9.0[7]	10.8[8]		8.1	9.2
	1974	8.2	10.2[6]	5.4[7]	10.2[8]		5.7	7.7
	1976	28.5	23.1[6]	20.7[7]	23.1[8]		16.1	13.1

1. 15 to 24 age group.
2. Post-secondary studies not completed.
3. 16 to 24 age group.
4. Secondary education dropouts.
5. Unemployed entrants into the labour force.
6. Lower secondary graduates (BEPC).
7. Upper secondary graduates (Bac).
8. Lower secondary vocational education graduates (CAP).

SOURCES: Canada: Out of School Into the Labour Force, op.cit.
United States: The Condition of Education, op.cit.
France: Various studies of the Centre d'études et de recherches sur les qualifications.

Table 35

TRANSFER RATIOS TO HIGHER EDUCATION

(As percentage of all qualified school leavers of the previous year)

	MALE				FEMALE				TOTAL			
	1965	1970	1973	1974	1965	1970	1973	1974	1965	1970	1973	1974
University type												
Belgium	73.2[4]	82.1	70.3	71.9	48.6[4]	54.8	50.0	52.3	64.1[4]	70.5	61.2	63.4
Denmark	94.0		100.0		60.0		54.4		78.9	80.3	76.7	
France (Universities)											81.1	79.2
Germany (Universities)	108.8	100.4	101.9		63.1	51.8	62.2		92.9	81.2	84.9	
Italy									78.3	84.6	85.5	(88.4)
Netherlands	76.1	68.2			25.8	25.5			55.5	50.0		35.3
Sweden	76.6	97.0	82.4[2]	79.0[3]	64.5	76.0	65.2[2]	73.7[3]	71.2	87.2	74.7[2]	76.7
United Kingdom	93.3[1]	95.4	94.7[2]		57.5[1]	56.8	59.7[2]		79.2[1]	78.8	79.1[2]	
of which Universities	75.8[1]	75.2	72.0[2]		48.2[1]	47.2	46.7[2]		64.8	63.1	60.9[2]	
Japan	34.4	37.9	40.5[2]		7.9	9.0	12.0[2]		21.5	23.7	28.5[2]	
United States	44.7	42.5	37.6	37.5	33.5	35.4	33.3	33.4	39.1	38.9	35.4	35.4
Higher education (overall)												
Sweden									80.7	68.8	(57.4)[2]	(53.5)[3]
United Kingdom	95.0[1]	99.2	91.6		76.5	76.5	76.8		86.4	88.2	84.4	
Japan	37.2	[illegible]	47.9[2]		19.2	24.6	30.6[2]		28.5	32.8	39.3[2]	
United States	63.1	68.6	62.3	62.0	45.3	54.4	53.5		54.1	61.5	57.9	57.8

NOTES: 1. 1967 2. 1972 3. 1973 4. 1966

( ) Estimates by the Secretariat.

SOURCE: Recent Student Flows in Higher Education, Institute of Education, European Cultural Foundation, Paris, July 1976.

Table 36

PROPORTION OF THE TOTAL OF NEW ENTRANTS TO NON-UNIVERSITY AND UNIVERSITY EDUCATION

	1965		1970		1975	
	NON-UNIVERSITY	UNIVERSITY	NON-UNIVERSITY	UNIVERSITY	NON-UNIVERSITY	UNIVERSITY
Australia	...	...	35.8	64.2	57.7	42.3
Austria	6.9	93.1	25.7	74.3	29.6	70.4
Denmark	44.5	55.5	52.1	47.9	54.2	45.8
Finland	36.3	63.7	41.5	58.5	38.7	61.3
France	29.7	70.3	24.2	75.8	30.8	69.2
Germany	28.5	71.5	33.9	66.1	27.7	72.3
Italy	4.0	96.0	3.0	96.9	3.3	96.7
Netherlands	58.2	41.8	54.5	45.5	69.4	30.6
Spain	56.4[1]	43.6[1]	27.8	72.2	16.7	83.3
Sweden	13.1	86.9	11.6	88.4	12.6[2]	87.4[2]
United Kingdom	45.3	54.7	47.6	52.4	41.3[3]	58.7[3]
Turkey	43.5	56.5	60.9	39.1	49.4[2]	50.6[2]
Yugoslavia	75.7	24.3	77.7	22.3	74.4[3]	25.6[3]
Japan	25.2	74.5	28.9	71.1	30.3	69.7
United States	27.8	72.2	36.7	63.3	38.7	61.3

NOTES: 1. 1966 2. 1972 3. 1974

SOURCE: Educational Statistics, OECD, forthcoming.

Table 37

AGE DISTRIBUTION OF STUDENTS
(As percentage of overall enrolment)

		- 20 YEAR OLD	20 to 24	25 to 29	30 and +
GERMANY					
University students	1965	2.6	65.0	32.4	
	1971/72	19.4	49.0	24.1	7.5
BELGIUM					
University students	1965	34.9	50.8	10.1	4.2
	1970	31.5	55.3	9.6	3.6
	1974	32.2	53.6	10.2	4.0
DENMARK					
University students	1965	14.3	59.0	26.7	
	1973[1]	5.7	48.2	46.1	
Total post-secondary	1965	13.3	63.0	23.7	
	1973[2]	4.6	52.6	42.8	
FRANCE					
University students	1965	22.1	51.9	26.0	
	1970[3]	22.8	63.2	14.0	
	1973	19.3	52.2	28.5	
Total post-secondary	1965	30.8	50.7	18.5	
	1970	27.2	61.0	11.8	
NETHERLANDS					
University students	1964	19.2	51.2	29.6	
	1971	16.0	49.1	24.5	10.4
SWEDEN					
Total post-secondary	1963	4.3	56.2	39.6	
University students	1963	3.1	51.8	28.5	16.6
	1967	6.0	56.7	25.1	12.2
	1971	4.6	46.7	32.8	15.9
UNITED KINGDOM					
Universities (full-time)	1965	36.8	52.1	11.1	
	1973	32.2	53.5	14.3	
Total post-secondary	1965	37.7	49.7	12.6	
(full-time)	1973	31.6	52.3	16.1	
ENGLAND AND WALES					
FE univ. full-time*	1972	29.9	54.6	15.5	
FE non-univ. full-time*	1972	24.8	52.0	23.2	
UNITED STATES					
Total post-secondary	1966	44.3	40.4	15.3	
	1972	32.7	39.3	13.5	14.5

* FE: Further Education.

NOTES:

1. Excluding University of Århus.
2. Excluding certain non-university level institutions which account for 13% of all post-secondary enrolments.
3. Excluding the "Grandes Ecoles", IUT's and "capacité en droit".

SOURCE: Recent Student Flows in Higher Education, op. cit.

Table 38

NETHERLANDS - DISTRIBUTION OF STUDENTS IN HIGHER EDUCATION BY SOCIAL BACKGROUND

(%)

	1961	1964	1967	1970
Upper class	42	38	38	37
Middle class	47	50	49	50
Lower class	11	11	13	14

SOURCE: Statistiek van het wetenschappelijk onderwijs, 1970/71.

Table 39

FRANCE - SOCIAL BACKGROUND OF STUDENTS BY TYPE OF INSTITUTION ATTENDED

(%)

FATHER'S SOCIO-PROFESSIONAL CATEGORY	ECOLE DES HAUTES ETUDES COMMERCIALES (BUSINESS SCHOOLS) 1971	UNIVERSITY *			UNIVERSITY INSTITUTES OF TECHNOLOGY (IUT)		POPULATION 17-21
		1967	1974	1977	1972	1977	1971
Farmers and farm workers ...	2.4	7.0	6.7	5.9	12.8	11.1	17.4
Directors of industry and commerce	10.1	15.4	11.7	10.9	12.6	11.8	9.4
Professional and upper management	51.5	34.5	32.9	33.7	13.6	15.6	5.2
Middle management	19.6	17.4	16.4	17.5	14.1	16.9	6.3
Office workers	5.1	9.3	9.2	9.1	10.7	9.8	7.6
Manual workers	2.5	11.1	12.6	12.9	22.8	24.8	40.1
Service professions, other and without profession	8.5	5.3	10.5	10.0	13.4	10.0	14.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Including IUTs and institutes.

SOURCE: Cibois and Markiewicz-Lagneau, Students in Short-Cycle Higher Education, OECD, Paris, 1976, p. 174, and for the University, Statistiques des étudiants inscrits dans les établissements universitaires, Doc. N° 4814, July 1978 issue, Services des études informatiques et statistiques, Ministères de l'Education et des Universités, Paris, 1978, p. 143.

Table 40 (a)

GERMANY - PERCENTAGE DISTRIBUTION OF STUDENTS ACCORDING TO THEIR SOCIAL BACKGROUNDS

FATHER'S SOCIAL BACKGROUND	ALL STUDENTS			FIRST-YEAR STUDENTS
	WT[1] 1951/52	WT[1] 1967/68	ST[2] 1973	ST[2] 1973
Lower group, lower classes	5.3	2.5	4.8	6.4
Uper group, lower classes		5.3	8.2	8.0
Self-employed farmers	4.5	3.3	3.8	4.3
Lower middle classes	39.0	29.1	25.4	24.5
Upper middle classes	50.8	57.1	55.3	54.0
Unclassifiable	0.4	2.7	2.5	2.8
Total	100.0	100.0	100.0	100.0

1. WT = Winter Term.
2. ST = Summer Term.

SOURCE: Individual Demand for Education, Vol. II. Case Studies - Germany, OECD, forthcoming.

Table 40 (b)

GERMANY - SOCIAL BACKGROUND OF FIRST-YEAR STUDENTS IN HIGHER EDUCATION

FATHER'S PROFESSIONAL STATUS	PERCENTAGE IN MALE ADULT POPULATION IN 1976	1966	1975	1976	
				UNIVERSITY	ENGINEERING INSTITUTE
Professionals and self-employed ..	16.0	28.9	22.5	21.6	20.8
Civil servants ...	9.3	25.8	20.5	22.2	14.1
Office workers ..	27.9	32.3	35.7	37.0	33.2
Manual workers .	45.8	10.3	18.2	16.0	28.0

SOURCE: OECD educational data file.

Table 41

SWEDEN - SOCIAL BACKGROUND OF NEW ENTRANTS TO HIGHER EDUCATION

FATHER'S PROFESSION	1962	1966	1970	1972
Men				
Farmer	8.1	7.4	7.7	7.1
Teacher	4.2	3.0	2.5	2.6
Profession requiring a degree	20.5	17.9	13.8	14.6
Officer	1.5	1.7	1.3	1.5
Head of industry	7.0	6.3	4.3	4.1
Tradesman	12.6	12.2	11.5	11.2
Upper management ..	16.5	20.2	19.8	20.6
Middle management/ Officer worker	12.0	12.3	14.3	13.2
Manual worker	17.6	19.1	24.8	25.2
Total	100.0	100.0	100.0	100.0
Women				
Farmer	8.5	7.6	8.8	9.0
Teacher	3.9	2.8	2.8	2.9
Profession requiring a degree	22.4	19.6	14.6	16.9
Officer	2.0	1.9	1.4	1.4
Head of industry	7.1	5.8	4.1	4.0
Tradesman	12.0	11.2	11.2	10.3
Upper management ..	18.8	21.0	21.7	21.1
Middle management/ Office worker	10.8	12.6	13.7	13.4
Manual worker	14.7	17.7	21.7	21.0
Total	100.0	100.0	100.0	100.0

SOURCE: Högskolestatistik II - Statistics on social background for students at universities and specialized colleges 1962/63-1972/73. Promemorior fran SCB, 1976 : 5.

Table 42

PROBABLE DEMAND FOR POST-SECONDARY EDUCATION BY GROUPS OF STUDENTS WITH SPECIFIC CHARACTERISTICS

	UNIVERSITY	NON-UNIVERSITY	EXIT
High SES - High ability			
- males	xxxx		x
- females	xxxx		x
High SES - Medium ability			
- males	xxx		xx
- females	xxx		xx
High SES - Low ability			
- males	x	xx	xx
- females	x	xx	xx
Medium SES - High ability			
- males	xxx	x	x
- females	xxx	x	x
Medium SES - Medium ability			
- males	xx	xx	x
- females	xx	xx	x
Medium SES - Low ability			
- males		x	xxxx
- females		x	xxxx
Low SES - High ability			
- males		xxx	xx
- females	x	xxx	x
Low SES - Medium ability			
- males		xx	xxx
- females		xxx	xx
Low SES - Low ability			
- males			xxxxx
- females			xxxxx

SOURCE: See Table 26.

Table 43

UNITED STATES - TIME SERIES RATES OF RETURN TO HIGHER EDUCATION

(%)

YEAR	SOCIAL	PRIVATE
1939	10.7	21.4
1949	10.6	13.2
1959	10.5	11.0
1969	11.1	11.5
1972	9.5	10.5
1974	7.5	8.5

SOURCES: 1939 and 1949 from M. Carnoy and D. Marenback, "The return to schooling in the United States, 1939-1969", Journal of Human Resources, Summer, 1975, pp. 316, 318. All other years from R. Freeman, "Overinvestment in college training?", Journal of Human Resources, Summer, 1975, p. 296.

Table 44

(a) FRANCE - LIKELIHOOD OF A GRADUATE ENTERING THE VARIOUS LEVELS OF ADMINISTRATION

(Trend in %)

SEX	CATEGORY	BACCALAUREAT			DEGREE		
		1962	1968	1972	1962	1968	1972
Male employees under 35	Upper management ...	30.9	24.1	23.5	61.9	57.8	57.8
	Middle management ..	39.0	42.1	42.1	25.2	30.2	29.2
	Office worker	30.1	33.8	34.4	12.9	12.0	13.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0
Female employees under 35	Upper management ...	5.4	3.4	2.4	30.6	25.6	22.7
	Middle management ..	35.3	33.9	30.1	36.7	34.8	35.2
	Office workers	59.3	62.7	67.5	32.7	39.6	42.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0

SOURCES: 1962 and 1968: 1968 Census, "Training", INSEE;
1972: Enquête sur l'emploi, INSEE, 1975, p. 100.
L. Lévy-Garboua, "Les demandes de l'étudiant ou les contradictions de l'université de masse", Revue Française de Sociologie, Vol. XVII, 1976, p. 53.

(b) SWEDEN - PERCENTAGE OF UNIVERSITY GRADUATES AMONG NEW RECRUITS AGED 30 AND BELOW IN SOME CATEGORIES OF THE CIVIL SERVICE DISTRIBUTION BY SALARY LEVELS

	14	15-16	17-19	20	TOTAL
1966	2	3	60	60	21
1970	3	6	69	70	26
1971	9	12	71	69	33
1972	19	19	60	60	34
1973	34	37	67	69	45

SOURCE: G. Bergendal, Higher Education and Manpower Planning in Sweden, National Swedish Board of Universities and Colleges, 1977.

(c) UNITED-STATES - PERCENTAGE DISTRIBUTION OF EMPLOYED UNIVERSITY GRADUATES

(%)

	1966	1970	1974	1976
- White collar workers :				
- Professional and Engineers	65.9	67.0	58.9	58.2
- Managers	17.1	16.6	18.8	17.8
- Clerical workers	12.1	11.6	14.1	15.4
- Blue collar workers :				
- Craftsmen, manual workers ..	2.9	3.1	4.6	4.9
- Service and farm workers ...	1.9	1.7	3.5	3.8
	100.0	100.0	100.0	100.0

SOURCE: The Condition of Education, op.cit., p. 28.

Table 45

UNITED STATES - PERCENTAGE OF INSTITUTIONS REPORTING EXTENSIVE CHANGE IN EMPHASIS ON ACTIVE RECRUITMENT OF STUDENTS BY TYPE OF STUDENT, PREVIOUS 1968-1974 AND ANTICIPATED 1974-1980

TYPE OF STUDENT	PREVIOUS SITUATION 1968-74	ANTICIPATED SITUATION 1974-80	DIFFERENCE
Traditional students	65	70	5
Ethnic minorities	51	52	1
Evening students	41	67	26
Low-income students	39	45	6
Adults over 22	38	66	28
Transfer students	38	56	18
Off-campus students	35	58	23
Early admissions from high school	14	34	20
Previous dropouts	14	31	17

NOTE: Numbers upon which percentages are based range from 915 to 1,175.

SOURCE: Glenny et al., op.cit.

Table 46

SUPPLY AND DEMAND OF TEACHERS
(some examples)

GERMANY

EDUCATIONAL LEVEL	1974/75	1984/85
Primary, general secondary and special education		
S	416,475	567,600
D	409,679/432,910	391,400/436,700
Difference	+ 6,796/- 16,435	+ 176,200/+ 130,900
Technical secondary (full-time and part-time)		
S	474,466	643,100
D	474,980/498,211	483,600/538,000
Difference	- 514/- 23,745	+ 159,500/+ 105,100

AUSTRALIA

Comparison between teachers supply and demand estimates

	1976	1981		1986	
	OBSERVED	(a) EXISTING NORMS	(b) IMPROVED NORMS	(a) EXISTING NORMS	(b) IMPROVED NORMS
Primary					
Demand	84,300	91,600	100,100	88,300	104,500
Supply		107,000	107,000	120,200	120,200
Supply exceeding demand		15,400 (13%)	6,900	31,900	15,700
Secondary					
Demand	79,500	81,200	89,300	89,100	100,400
Supply		110,800	110,800	125,900	125,900
Supply exceeding demand		29,600 (28%)	21,500	36,800	25,500

ITALY

Supply and demand of teachers

	1974	1980
Primary		
Supply	275,644	527,644
Demand	232,645	216,432
Secondary		
Supply	433,843	833,843
Demand	380,899	493,201

SOURCE: "Present Situation and Future Prospects of Teacher Supply and Demand in Member Countries", Teacher Policies in a New Context, OECD, forthcoming.

Table 47

PUBLIC EXPENDITURE ON EDUCATION (EE) EARLY 1960s AND EARLY 1970s

(In per cent of "trend" GDP at current prices)

		EARLY 1960s	EARLY 1970s	IMPLIED ELASTICITY OF:	
				TOTAL EE WITH RESPECT TO GDP AT CURRENT PRICES	PER CAPITA EE WITH RESPECT TO PER CAPITA INCOME (AT CONSTANT PRICES)
Australia	(1963/64-71/72)	3.0	4.5	1.50	1.23
Austria	(1963-72)	3.1	5.2	1.69	1.28
Belgium	(1963-72)	4.2	5.4	1.28	1.08
Canada	(1963/64-70/71)	4.6	7.7	1.68	1.43
Denmark	(1960-70)	4.0	7.0	1.73	1.32
Finland	(1963-70)	6.2	6.3	1.02	0.86
France[1]	(1963-73)	2.5	3.1	1.23	1.09
Germany	(1963-71)	3.0	4.2	1.40	1.13
Greece	(1960-70)	1.7	2.3	1.34	0.99
Ireland	(1960-70)	3.0	4.9	1.57	1.33
Italy	(1963-72)	3.2	4.0	1.31	1.09
Japan	(FYs1963-71)	3.8	3.6	0.99	0.75
Netherlands	(1960-70)	4.8	7.6	1.58	1.06
Norway	(1963-70)	5.1	6.0	1.17	1.13
Portugal	(1960-70)	1.9	1.9	1.08	1.08
Spain	(1960-70)	1.2	2.4	1.97	1.39
Sweden	(1963-70)	5.0	7.1	1.41	1.25
Switzerland	(1963-72)	3.3	4.9	1.46	1.32
Turkey	(1960-68)	2.3	3.5	1.50	1.41
United Kingdom	(FYs1963-71)	4.8	5.6	1.27	1.20
United States	(1963/64-72/73)	4.5	6.0	1.30	1.14
Dispersion[2]		1.3	1.7	0.24	0.17
Average[3]		3.3	4.6	1.38	1.16
Average EEC[3]		3.7	5.1	1.39	1.14

NOTES:

1. Ministry of Education expenditures only: in 1973 total public expenditure is estimated at 4.5% of GDP.
2. Measured by standard deviation.
3. Geometric mean.

SOURCE: Public Expenditure on Education, OECD, Paris, 1976, Table 2.

Table 48

CURRENT PUBLIC EXPENDITURE ON EDUCATION BY LEVEL* AND ASSOCIATED EDUCATIONAL EXPENDITURE (EE) AS A PERCENTAGE OF GNP

	1960	1965	1970	1971	1972	1973	1974	1975
Austria								
Total	2.3	2.7	3.3	3.4	3.5	4.7	3.6	4.0
Primary and secondary	1.7	2.3	2.8	2.9	2.9	4.0	3.0	3.3
Higher	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.6
Associated EE	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2
Denmark								
Total		3.8	4.3	4.9	4.9	4.8	5.1	5.4
Primary and secondary	...	2.8	3.0	3.4	3.4	3.4	3.6	...
Higher	...	0.8	1.1	1.2	1.2	1.2	1.3	1.0
Associated EE	...	0.1	0.2	0.2	0.2	0.3	0.3	0.1
Finland								
Total	3.4	3.3	4.3	4.4	3.7	3.8	3.6	4.2
Primary and secondary	3.2	3.1	3.8	3.7	3.3	3.3	3.0	3.5
Higher	...	0.2	0.4	...	0.3	0.4	0.4	0.6
Associated EE	0.4	0.4	0.3	0.1	0.4	0.5	0.6	0.7
France								
Total	2.1	2.7	3.2	3.2	...	3.3	3.3	3.2
Primary and secondary	1.9	2.1	2.5	2.5	...	2.4	2.5	2.6
Higher	0.1	0.2	0.4	0.4	...	0.4	0.4	0.4
Associated EE	0.2	0.5	0.3	0.3	...	0.4	0.3	0.6
Germany								
Total	1.9	1.7	2.2	2.4	2.5	2.6	2.9	3.0
Primary and secondary	(1.6)	1.4	1.6	1.7	1.6	1.7	1.9	...
Higher	0.2	0.3	0.4	0.5	0.5	0.5	0.6	...
Associated EE	0.1	0.1	0.1	0.2	0.3	0.3	0.3	...
Italy								
Total	3.3	3.8	3.8	3.3	4.3	4.6	...	...
Primary and secondary	...	...	...	...	...	...	...	...
Higher	...	...	...	...	...	...	...	...
Associated EE	0.3	0.3	0.3	0.3	0.3	0.3	...	...
Japan								
Total	2.9	3.1	2.7	2.8	2.7	2.8	3.3	3.5
Primary and secondary	1.8	2.4	2.3	2.1	2.1	2.1	2.6	2.8
Higher	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.4
Associated EE	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Netherlands								
Total		4.7	5.1	5.2	5.3	5.4	6.4	4.6
Primary and secondary	...	3.2	3.4	3.5	3.6	3.6	3.7	4.0
Higher	...	(0.9)	0.9	1.0	0.9	1.0	1.6	1.9
Associated EE	...	0.2	0.4	0.4	0.4	0.4	0.2	0.2
Norway								
Total			5.7	6.0	5.0	5.2	5.0	5.2
Primary and secondary	...	...	4.5	4.6	3.7	3.7	3.5	3.8
Higher	...	...	0.7	0.8	0.6	0.7	0.7	0.7
Associated EE	...	...	0.3	0.4	0.5	0.5	0.4	0.4
Sweden								
Total	2.6	3.3	5.2	5.0	4.9	4.8	4.7	5.0
Primary and secondary	2.2	2.3	3.2	2.7	2.6	2.5	2.5	2.7
Higher	0.2	0.3	0.8	0.7	0.6	0.6	0.6	0.6
Associated EE	0.5	0.7	0.7	1.1	1.2	1.2	1.1	1.0
United Kingdom								
Total		3.2	3.6	3.8	4.0	4.0	4.8	5.5
Primary and secondary	...	2.3	2.6	2.7	2.9	2.9	3.5	...
Higher	...	0.6	0.8	0.8	0.8	0.8	0.9	...
Associated EE	...	0.6	0.7	0.7	0.7	0.7	0.7	...
United States								
Total		3.9	5.3	5.4	5.2	5.6	5.4	5.4
Primary and secondary	...	3.0	3.8	3.9	3.8	4.1	3.8	3.8
Higher	...	0.9	1.4	1.5	1.4	1.5	1.6	1.6
Associated EE	...	...	...	...	...	...	...	...
Yugoslavia								
Total		3.3	3.9	3.8	3.7	3.3	3.6	4.4
Primary and secondary	...	2.7	3.0	2.9	2.9	2.7	2.7	3.2
Higher	...	0.5	0.6	0.6	0.6	0.5	0.5	0.7
Associated EE	...	0.2	0.3	0.3	0.3	0.3	0.3	0.3

* Excluding associated educational expenditure.

SOURCE: Educational Statistics, OECD, forthcoming.

Table 49

TREND IN EDUCATIONAL EXPENDITURE AS A PERCENTAGE OF PUBLIC EXPENDITURE

(some examples)

GERMANY

(%)

	1970	1973	1974	1975	1976
Total Educational Expenditure	14.1	16.1	16.8	15.6	16.3
Of which:					
Primary and secondary .	8.4	9.4	9.8	9.2	9.6
Higher	3.5	3.9	4.1	3.7	3.9

SOURCE: Grund und Struktur Daten, der Bundesminister für Bildung und Wissenschaft, Bonn, 1977.

JAPAN

	1971	1972	1973	1974	1975
Total Educational Expenditure	20.4	19.7	19.9	21.3	22.3

SOURCE: Statistics of Education, Ministry of Education, Japan, 3-7812.

FRANCE

	1970	1971	1972	1973	1974	1975	1976	1977
Total Educational Expenditure	16.9	17.9	18.4	18.4	18.5	17.9	18.8	20.5

SOURCE: Tableaux de l'Education Nationale. Edition 1978, Service Central des Statistiques et Sondages. Ministère de l'Education, Paris.

Table 50

UNITED KINGDOM - ANNUAL INCREASES IN CURRENT PUBLIC EXPENDITURE BY LEVEL OF EDUCATION

(%)

	1971/72 1972/73	1972/73 1973/74	1973/74 1974/75	1974/75 1975/76	1975/76 1976/77
Pre-primary and primary	4.9	- 3.4	5.5	2.6	2.1
Secondary	6.03	8.26	7.07	3.27	1.07
Further Education	6.84	1.9	3.6	7.1	7.8
Universities	2.15	11.0	4.2	2.1	2.9
Teacher training	3.2	2.7	- 4.7	- 6.8	- 3.5
TOTAL	5.2	6.3	4.9	3.6	2.9

SOURCE: National Income and Expenditure, Central Statistical Office, London, 1977.

Table 51

(a) UNITED STATES - AVERAGE CURRENT EXPENDITURE PER STUDENT
(At constant 1975/76 dollars)

	1969	1971	1973	1975	1976
Public primary and secondary education	1,198	1,334	1,364	1,388	...
Higher education (all institutions)	2,821	2,936	2,794	2,992	3,017

SOURCE: The Condition of Education, Vol. 3, op.cit., pp. 173 and 183.

(b) ENGLAND AND WALES - PUBLIC CURRENT EXPENDITURE PER FULL-TIME PUPIL/STUDENT
(At constant 1977 pounds)

INSTITUTION	1966/67	1973/74	1974/75	1975/76	1976/77 (Forecast)
Pre-primary	359	473	603	679	714
Primary	182	224	279	288	297
Secondary					
- compulsory	292	357	421	419	422
- post-compulsory	534	640	813	766	773
Further education					
- non-advanced	830	800	920	900	890
- advanced	1,290	1,230	1,430	1,400	1,370
Polytechnics					
- non-advanced	-	1,230	1,410	1,460	1,240
- advanced	-	1,900	2,190	2,260	1,930
University	2,450	2,425	2,400	2,425	2,400

SOURCE: Finance and Awards, 1976, Vol. 5, Statistics of Education, HMSO, London.

Table 52

GLOBAL ANNUAL OUTFLOWS FROM THE EDUCATIONAL SYSTEM

(some examples)

		1970	1971	1972	1973	1974	1975
Netherlands	M		102,629	101,136	106,747	114,132	101,809
	F		93,277	93,655	96,991	104,008	85,340
France	Total	-	-	-	-	-	735,200
	(1)	581,600	665,200	650,600	701,100	714,100	678,700
England and Wales	(2)	614,100	613,400	644,700	416,400	681,500	691,800
	(3)	482,100	479,900	504,800	285,300	545,800	542,500

NOTES:

1. Outflows from Ministry of Education establishments (and those of the Secrétariat d'Etat aux Universités).
2. Total school leavers.
3. Destinations other than full-time higher education (employment and unknown).

SOURCES: Netherlands: Flows within the educational system and entry into the labour force, 1975, Central Bureau of Statistics, p. 36.

France: "Les sorties du système scolaire", Economie et Statistiques No. 92, 1977.

England and Wales: "School Leavers", Vol. 2, Statistics of Education, 1971 to 1975.

Table 53

GERMANY - DISTRIBUTION OF OUTFLOWS FROM THE EDUCATION SYSTEM BY LEVEL OF STUDIES

(%)

LEVEL OF STUDIES	1965	1976
1. End of compulsory schooling	74.0	47.3
of which: with successful completion	55.5	35.7
without completion	17.7	11.6
2. Lower secondary	19.4	32.5
(a) Realschule graduates	9.5	15.2
(b) With grade 10 in Gymnasium	2.8	3.4
(c) Other (vocational education)	7.2	14.0
3. Upper secondary	6.6	20.2
(a) From Gymnasium	6.4	13.0
(b) From a Fachoberschule	–	5.3
(c) Other	0.2	1.9
TOTAL	100.0	100.0
NUMBERS	(761,500)	(983,900)

SOURCE: OECD educational data file.

Table 54

NETHERLANDS - DISTRIBUTION OF OUTFLOWS FROM THE EDUCATION SYSTEM BY LEVEL OF STUDIES

LEVEL	MEN		WOMEN	
	1971	1975	1971	1975
Primary	5	5	5	5
Secondary (lower)				
- without diploma	15	12	17	13
- with diploma	39	27	36	18
Secondary (upper)				
- without diploma	8	12	8	12
- with diploma	14	19	25	38
Higher				
- without degree	5	8	3	3
- with degree	15	18	6	11
	100	100	100	100

SOURCE: See Table 52.

Table 55

FRANCE - DISTRIBUTION OF OUTFLOWS FROM THE EDUCATION SYSTEM BY LEVEL OF QUALIFICATION

	1971	1975
VI and V bis (compulsory education without qualification)	44.5	40.5
V (vocational diploma)	32.5	35.8
IV (upper secondary diploma)	9.3	7.2
III (short-cycle higher diploma)	4.9	5.7
I and II (university degree)	8.7	10.7
	100.0	100.0

SOURCE: See Table 52.

Table 56

UNITED STATES - YEARS OF SCHOOL COMPLETED BY PERSONS 25 YEARS OLD AND OVER

	TOTAL	LESS THAN 5 YEARS	5 to 11 YEARS	12 to 15 YEARS	16 + YEARS	AVERAGE
1950 ...	100	10.8	55.8	27.4	6.0	9.3
1960 ...	100	8.3	50.6	33.4	7.7	10.5
1970 ...	100	5.3	39.5	44.2	11.0	12.2
1975 ...	100	4.2	33.2	48.6	13.9	12.3
1980[1] ...	100	1.5	25.4	54.7	18.5	-
1990[1] ...	100	0.6	18.0	57.6	23.8	-

1. Forecast.

SOURCE: US Department of Labor. Bureau of Labor Statistics, Special Labor Force Report n° 60, 1974.

Table 57

SWEDEN - FUTURE DEVELOPMENT OF THE EDUCATIONAL STRUCTURE OF THE LABOUR FORCE

EDUCATIONAL LEVEL	1970	1980	1990	2000
Basic education	46.0	33.4	20.2	10.5
Secondary	43.1	51.6	51.7	69.0
Higher	7.0	11.9	15.8	
Other	4.0	3.1	2.4	
	100.0	100.0	100.0	-

SOURCE: The Swedish Population by Level of Education 1970-2000, National Central Bureau of Statistics N° 3 - 1975.

Table 58

CANADA

(a) TREND IN OUTFLOWS FROM EDUCATIONAL INSTITUTIONS

(1966 = Index 100)

LEVEL AT WHICH LEAVING	1971	1976	1977	1980	1983	1986
Secondary (completed or not)	125	126	138	126	112	101
Post-secondary (completed or not)	225	311	314	326	332	318
Total	144	161	171	164	153	141
Number of students (thousands)	360.5	579.6	615.3	590.0	550.0	508.0

(b) DISTRIBUTION OF OUTFLOWS FROM THE EDUCATION SYSTEM BY LEVEL OF STUDIES

(%)

LEVEL	1971	1976	1981	1986
Elementary - secondary				
a) not completed	51.0	43.4	41.5	39.5
b) completed	20.0	20.7	21.4	18.6
Sub-total	71.0	64.1	62.9	58.2
Post-secondary				
a) not completed	13.6	19.0	18.8	21.2
b) completed:				
- first cycle degree ...	6.4	6.8	7.8	8.1
- higher degree	7.6	8.7	9.1	10.7
- post-graduate degree .	1.4	1.3	1.5	1.9
Sub-total	29.0	35.9	37.1	41.8
	100.0	100.0	100.0	100.0

SOURCE: Out of School Into the Labour Force, op. cit.

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